THE ARCHITECTS' JOURNAL



standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur

NEWS and COMMENT

Astragal's Notes and Topics
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Diary
Criticism

TECHNICAL SECTION

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CURRENT BUILDING

Major Buildings described:
Details of Planning, Construction, Finishes and Costs
Buildings in the News
Building Costs Analysed

Architectural Appointments Wanted and Vacant

No. 3446] [Vol. 133

THE ARCHITECTURAL PRESS

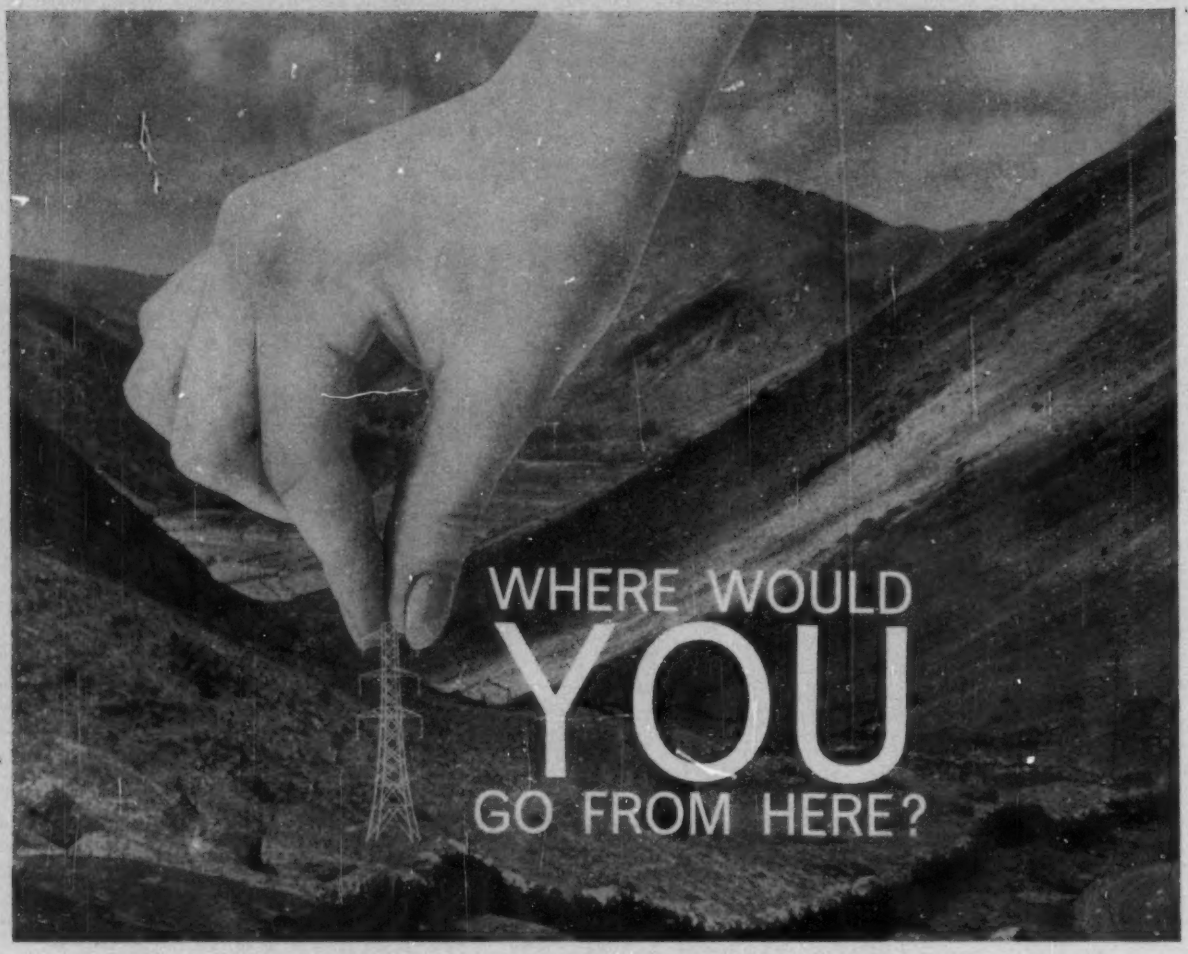
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their addresses and telephone numbers. The glossary is published in two parts—A to Ii one week, Il to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: J. H. Holden, College of Art, Cavendish Street, Manchester 15	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5533
ABT	Association of Building Technicians. 156, Waterloo Road, S.E.1.	Waterloo 5427/8
ACGB	Arts Council of Great Britain. 4, St. James's Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 5861
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BASA	British Architectural Students Association. Building Centre, 26 Store Street, W.C.1.	
BC	Building Centre, 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portland Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BE	Building Exhibition. 11, Manchester Square, W.1.	Hunter 1951
BEDA	British Electrical Development Association, 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St.,W.1.	Mayfair 9000
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o J. Hurst, A.R.I.B.A., County Hall, Dorchester.	
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England, 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4442
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors. 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor). Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	Federation of Painting Contractors. St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Belgravia 4321
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 37, Soho Square, W.1.	Gerrard 5056

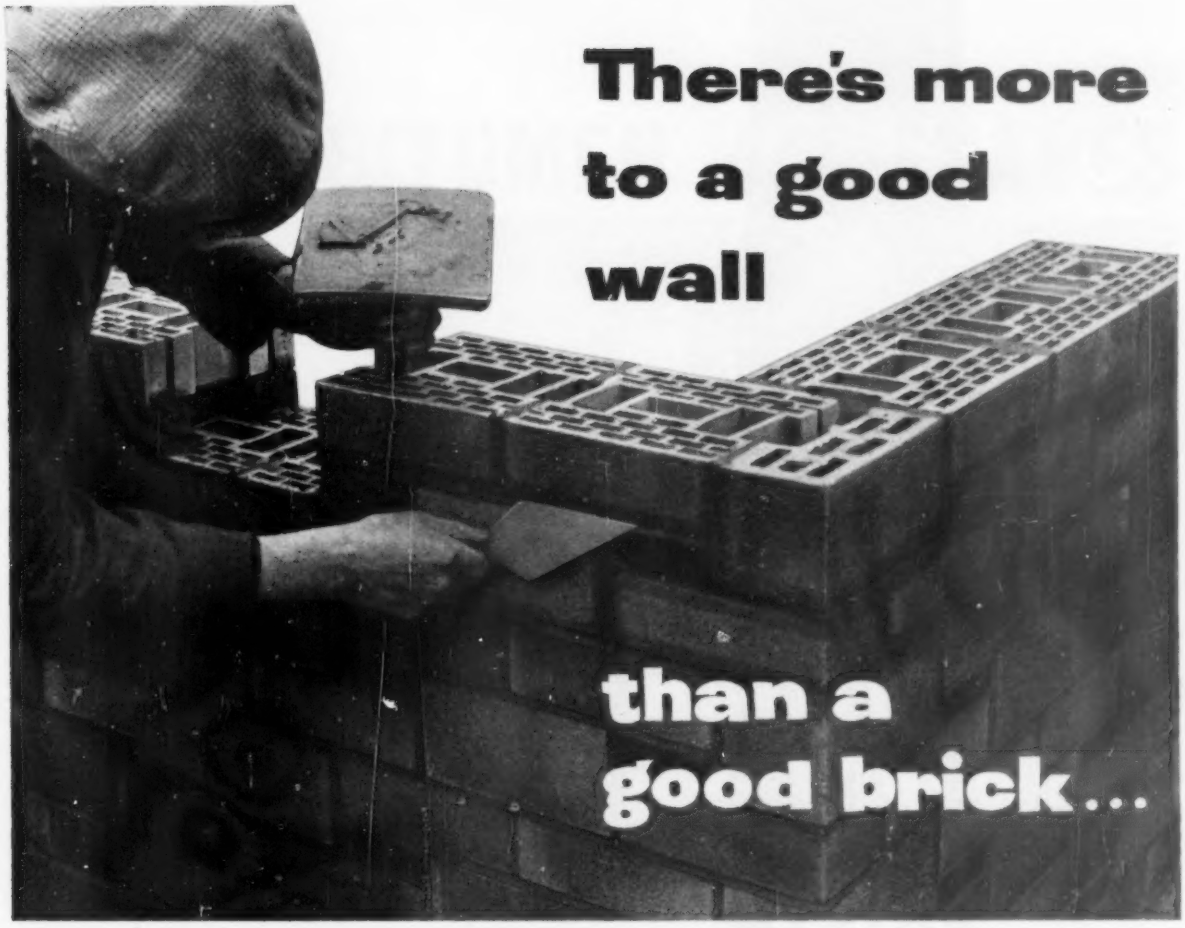


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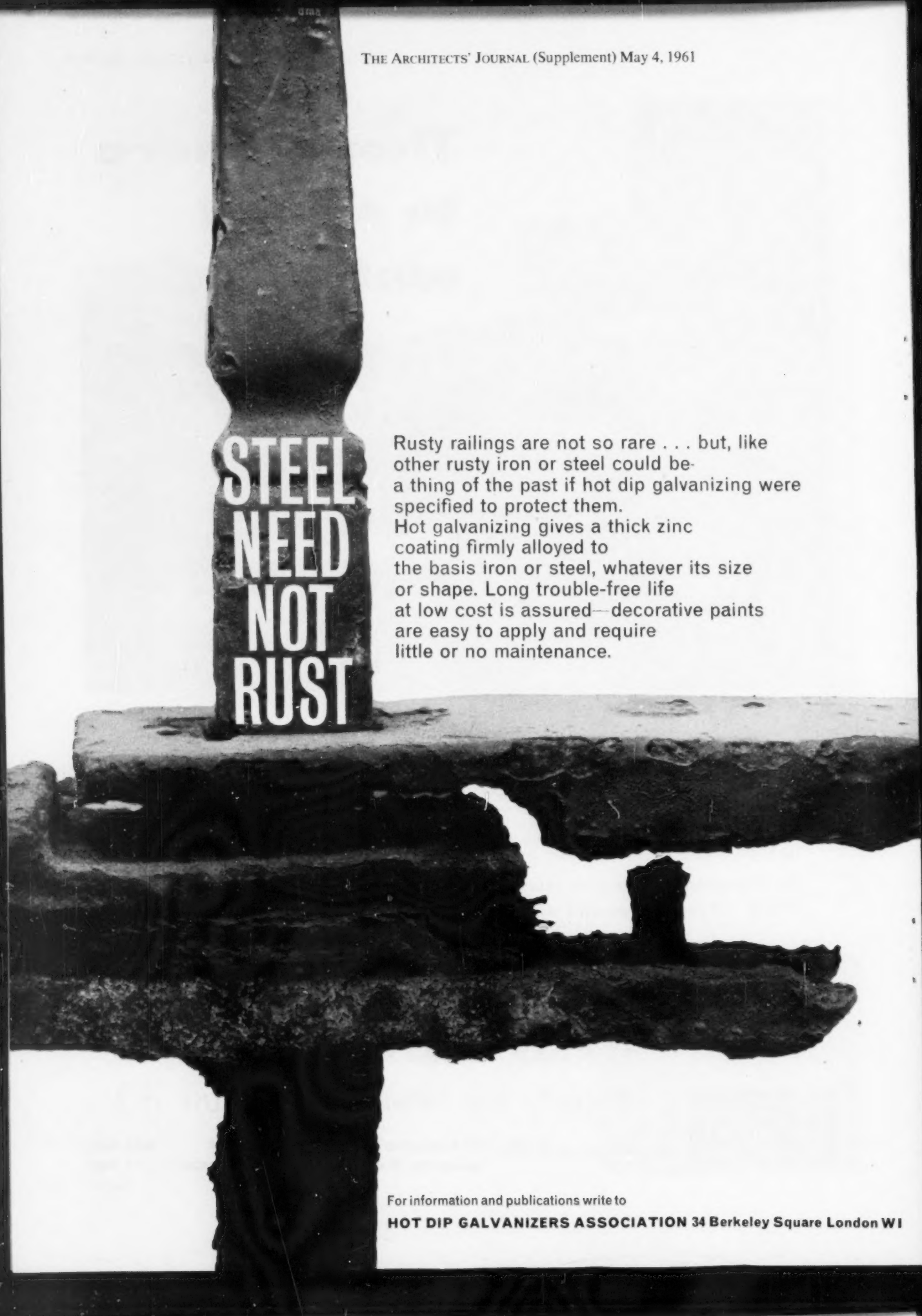
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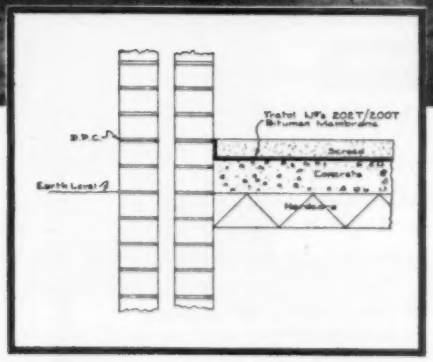
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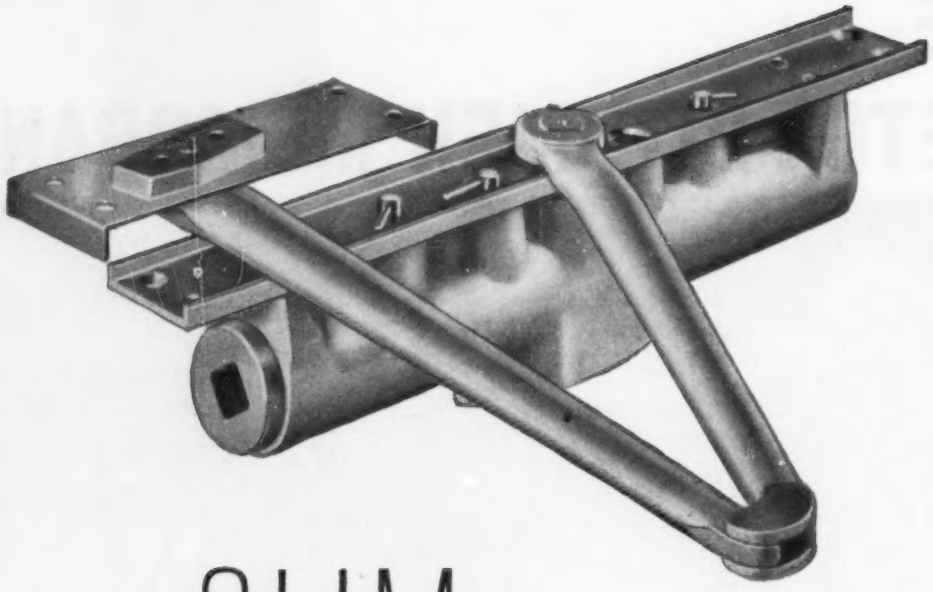
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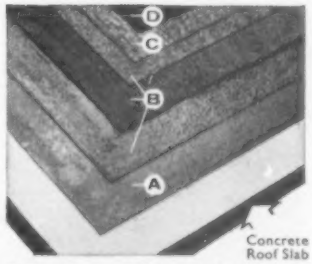
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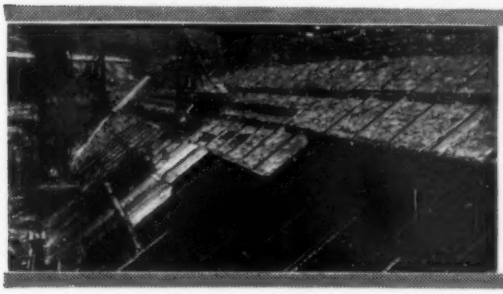
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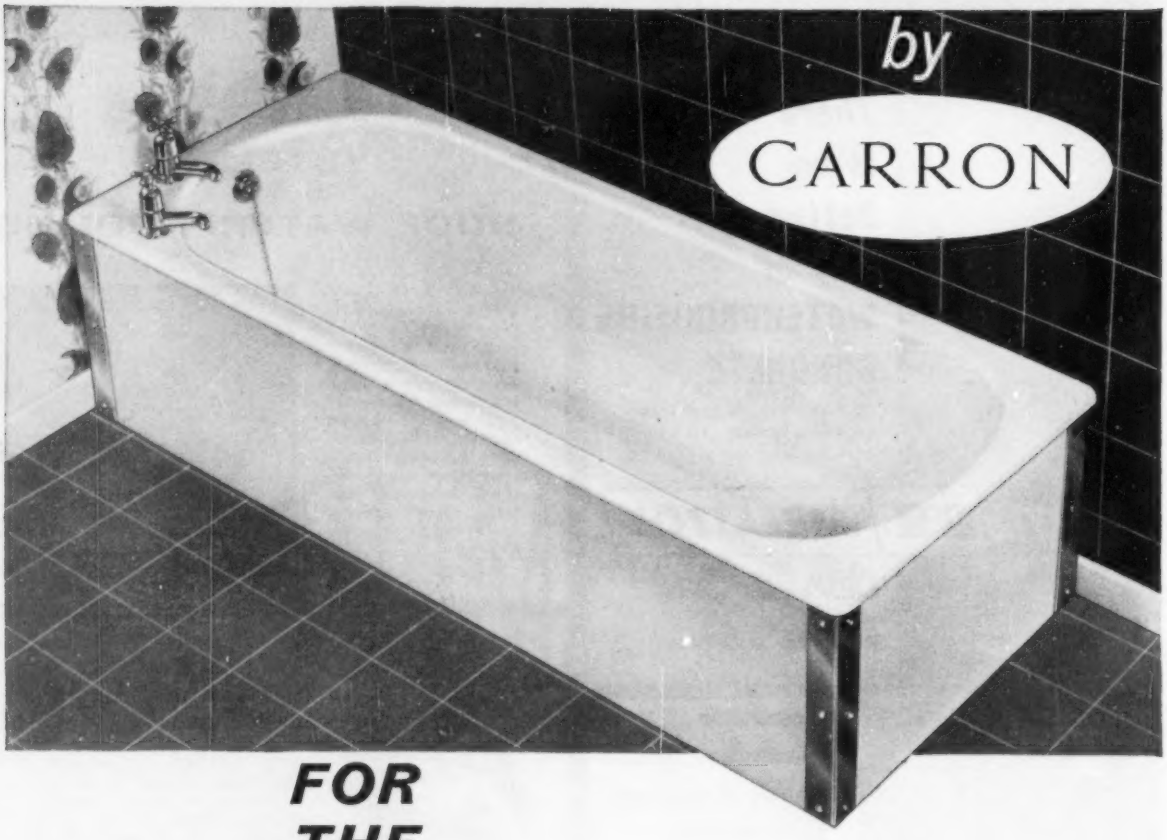
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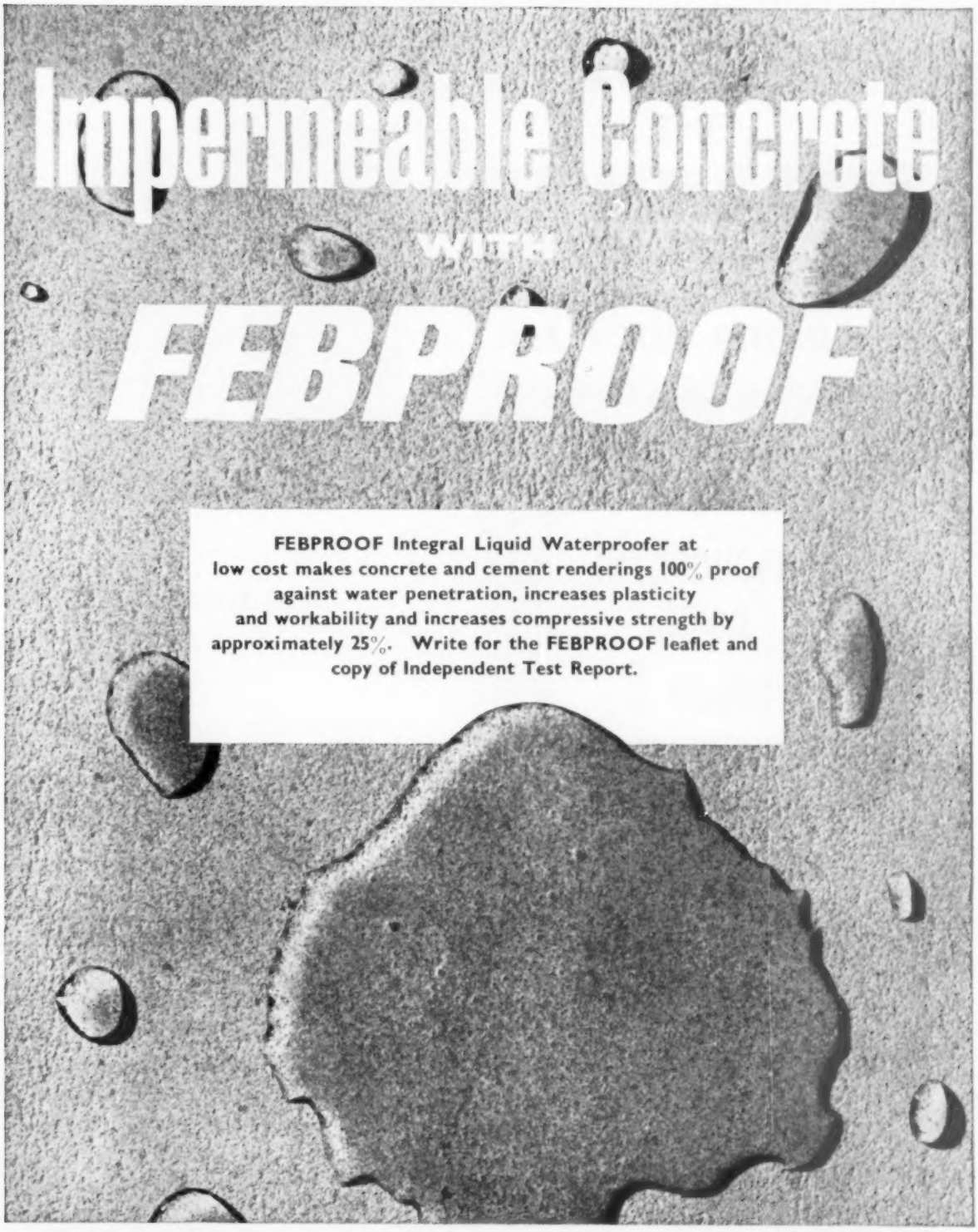
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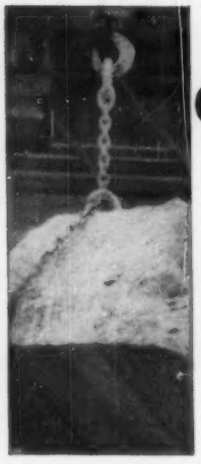
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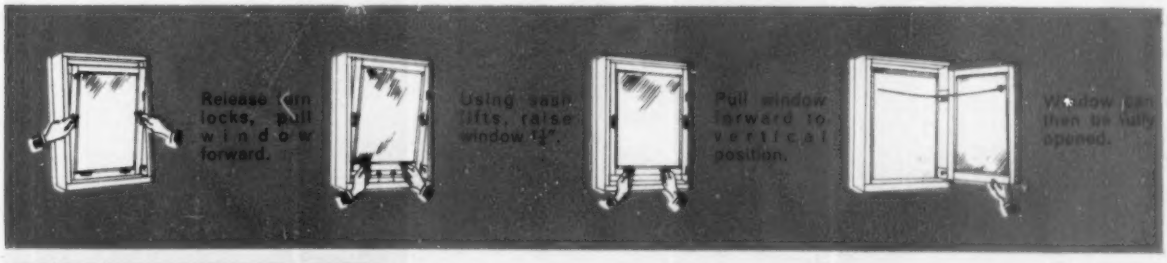
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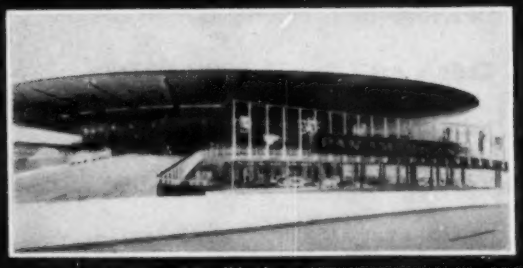
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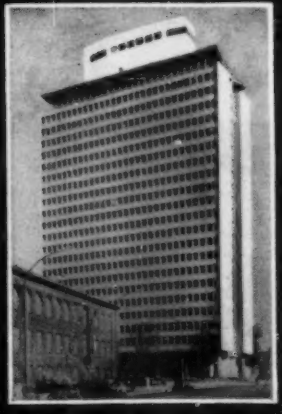
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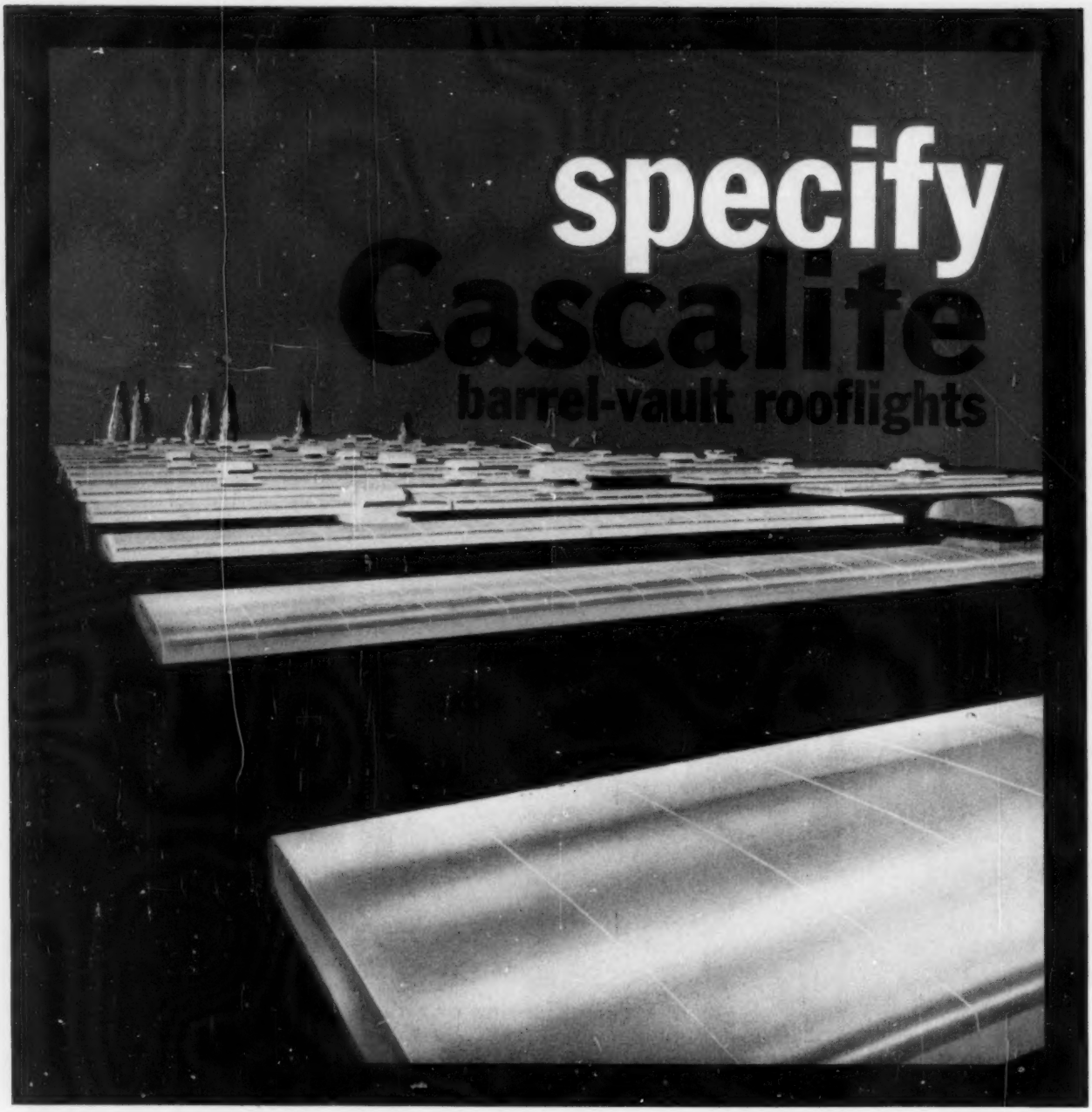
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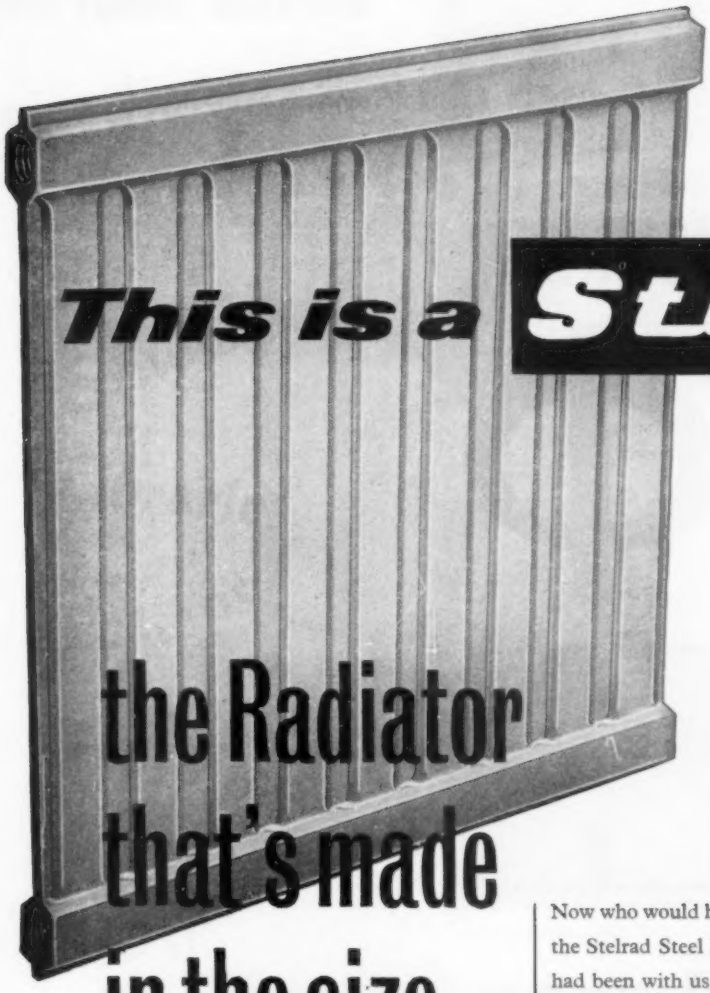
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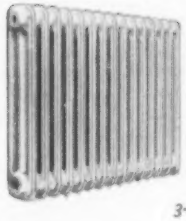
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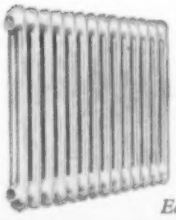


Angle-Wall



3-Column

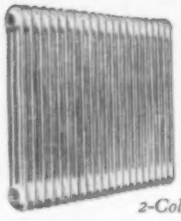
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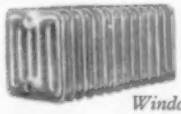
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Some were doubters, holding forth about steel and how the only Radiator to use was one that was not only heavy to handle but ungainly to behold. But where is the Stelrad today? In buildings large and small throughout the length and breadth of the land, and in a range so wide there is not a single nook a Stelrad cannot heat.



2-Column



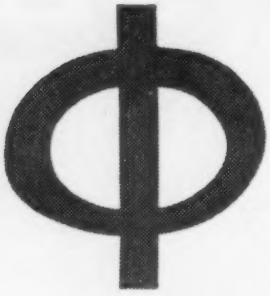
Window seat type

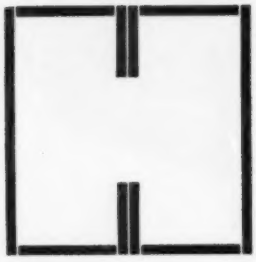
STEEL RADIATORS LIMITED

BRIDGE ROAD. SOUTHALL, MIDD .ESEX · Telephone: SOUthall 2603

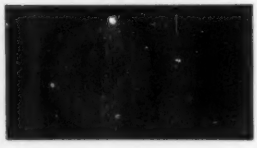
A collection of furniture, including Formation, Ahrend and Holzäpfel, is on display...

FORMATION FURNITURE





Ryman



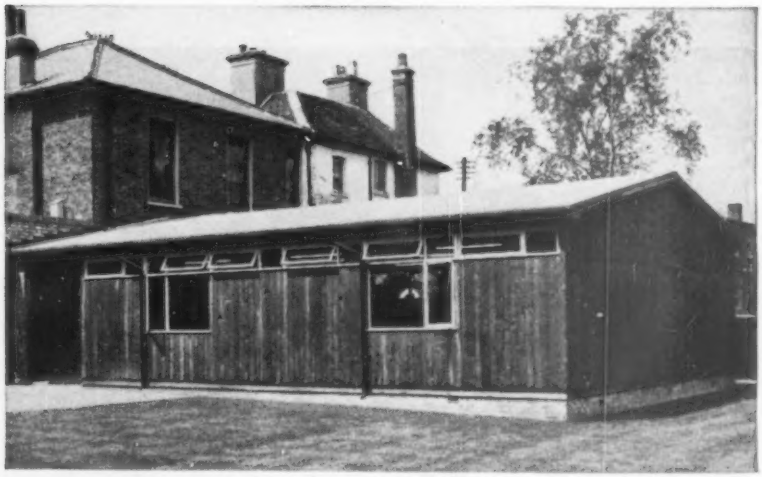
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SPORTS PAVILION.
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Full details of the buildings shown, and all Thorns building systems are given in their New Catalogue which is unique, in that it gives at a glance, sizes, prices, plans and specifications. It is available, free, to bona fide enquirers.

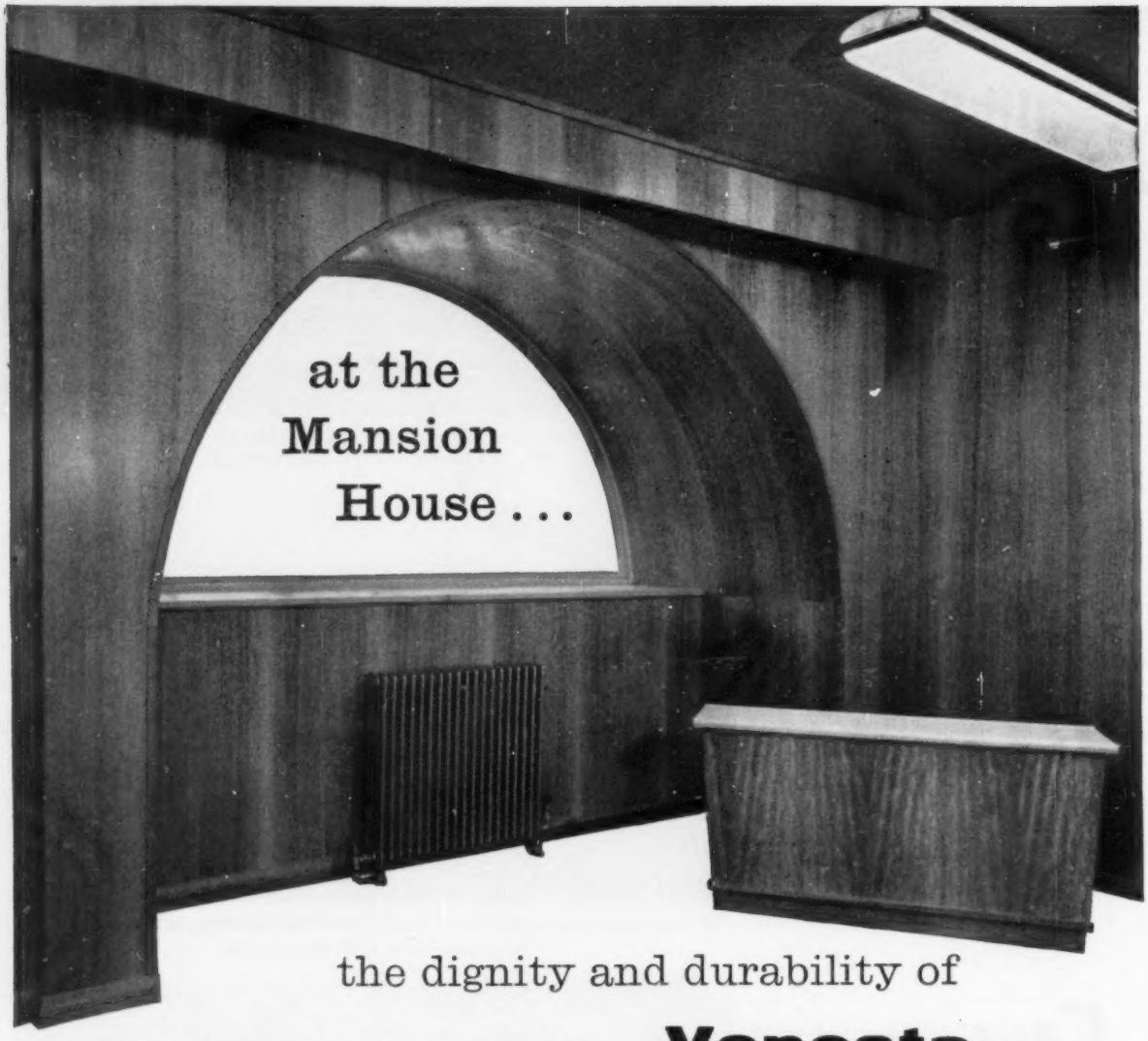
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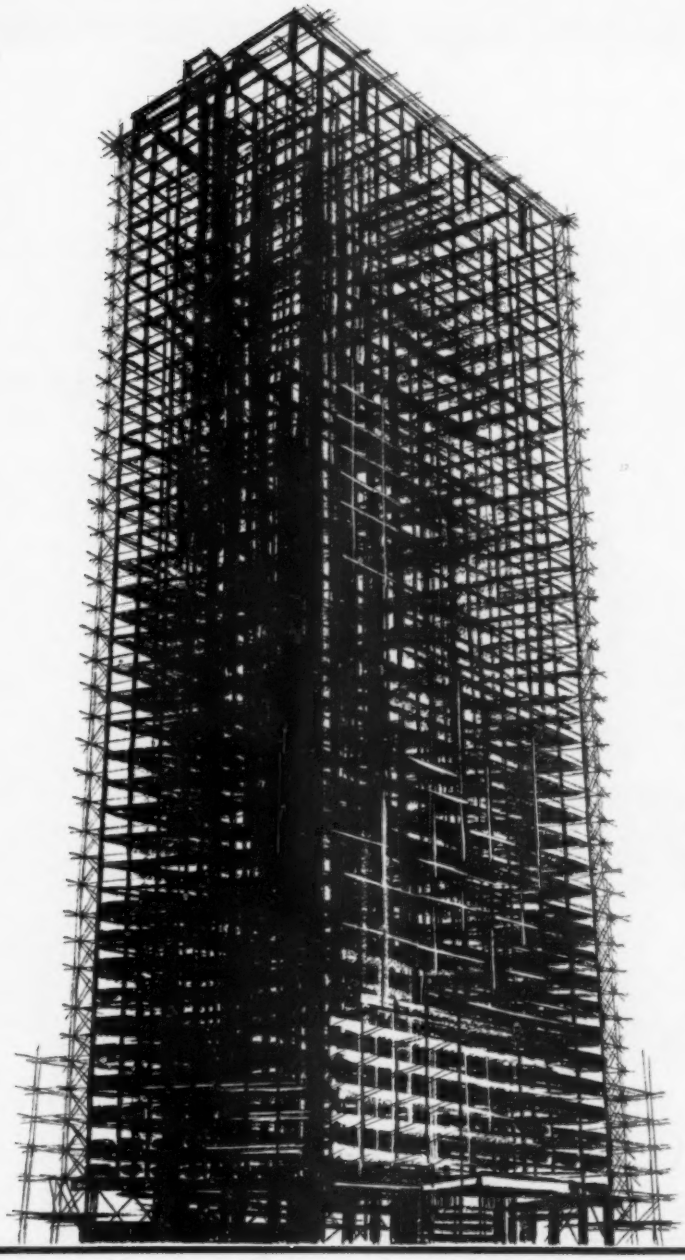
The wide choice of grains and figures available in Venesta veneered plywood makes it the ideal decorative material for schemes of many kinds where a high-quality and enduring finish is required. *Please write for leaflet.*

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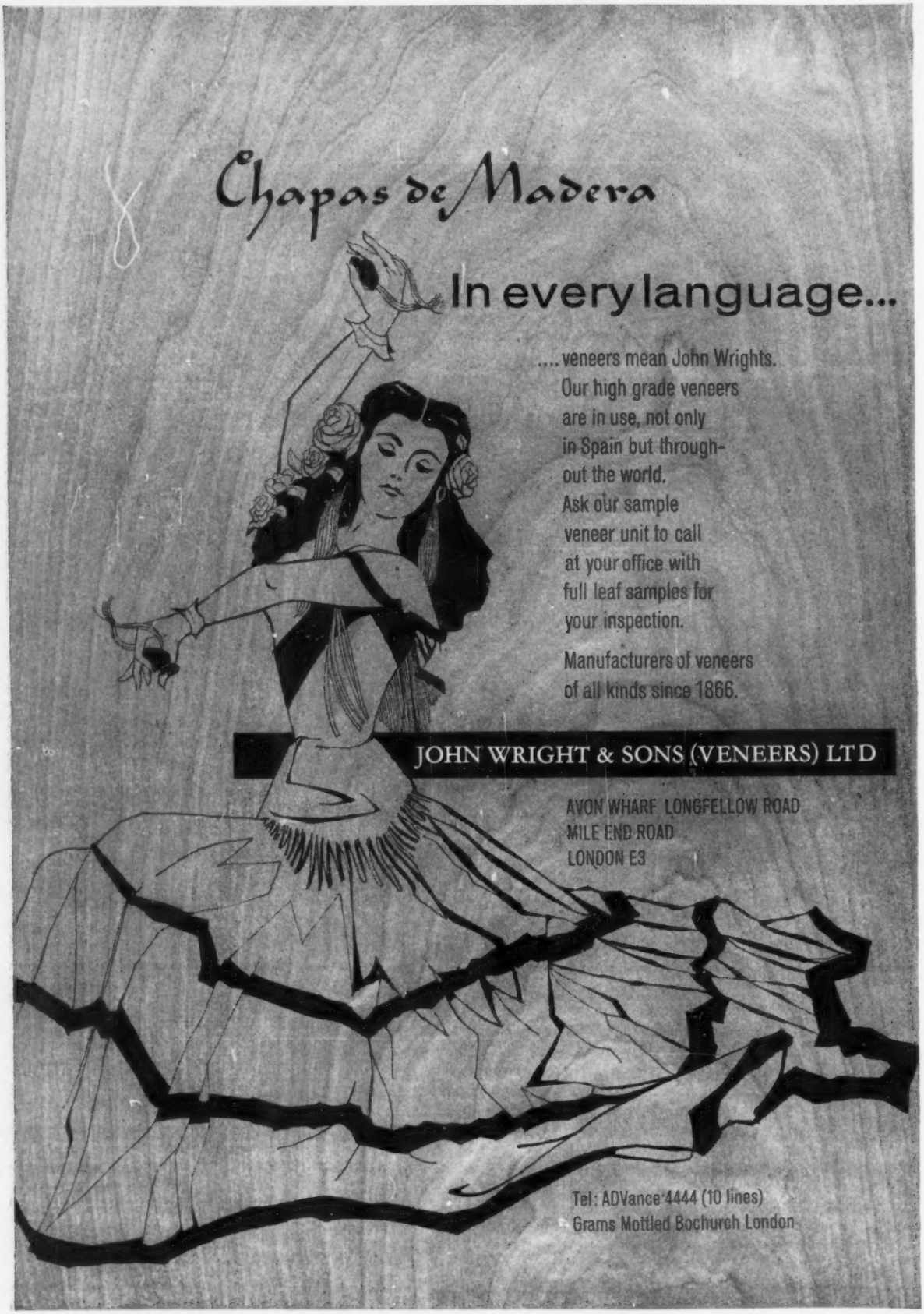


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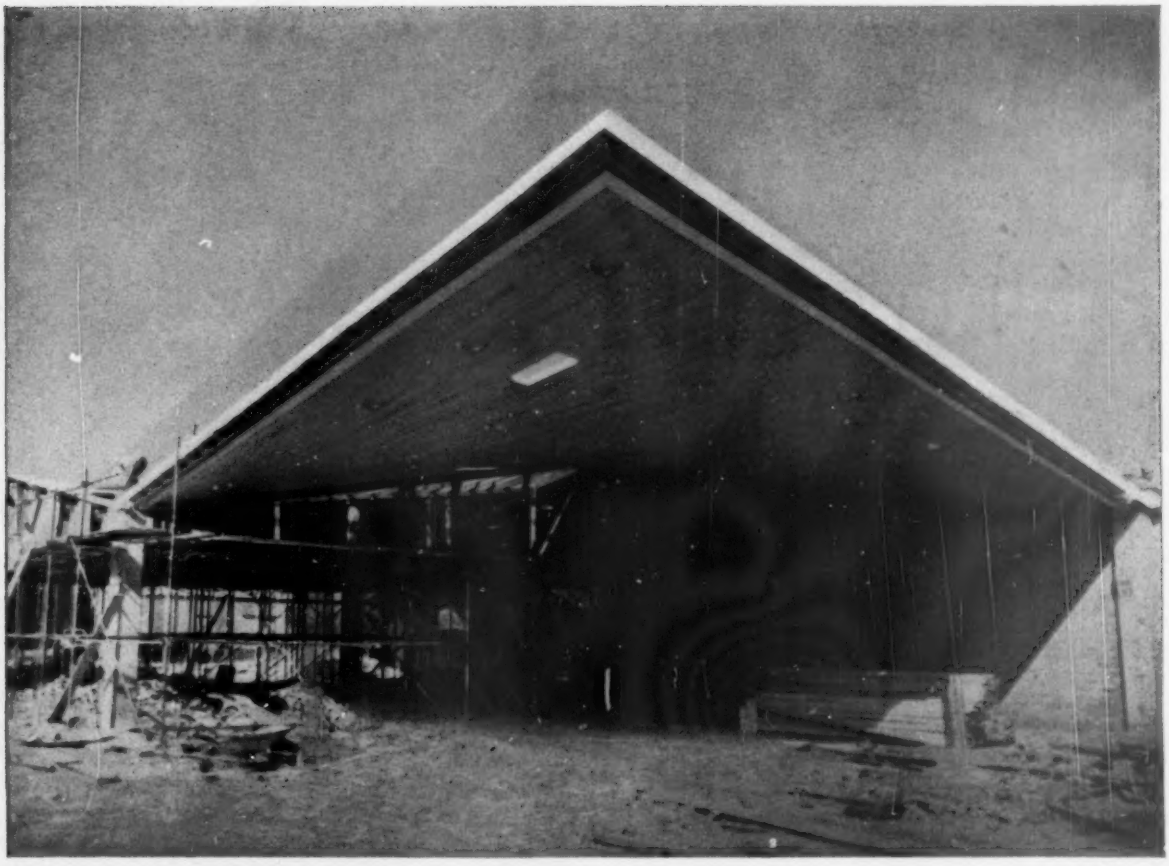
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THE FLOOR QUARRY ASSOCIATION

FEDERATION HOUSE STOKE-ON-TRENT STAFFORDSHIRE

FQA 10



Elements of construction

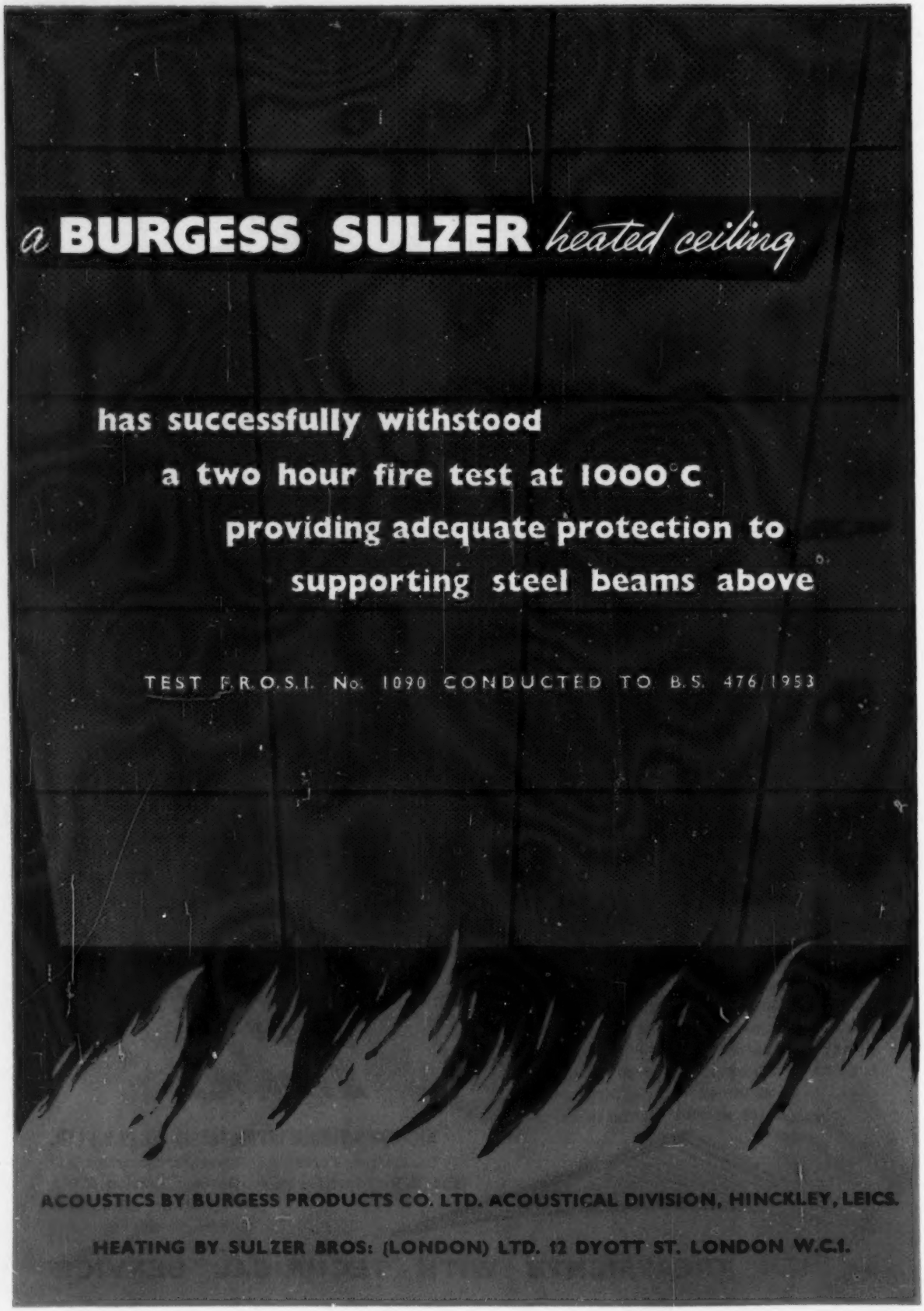
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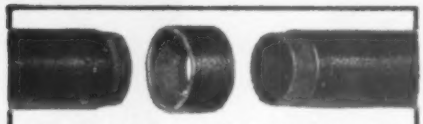
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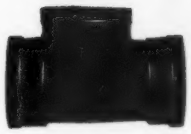
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- Liquids flow faster, easier

For electrical and other conduit work
Flexpipe is available in diameters of 2", 3", 3½", 4", 5" and 6"



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5"



Junction 90°



Adaptors—Flexpipe to stoneware and cast iron



Knuckle Bends—45° - 90°



Junctions 135° - 120° 112½° - 95° - 90°



Sweep and Short Radius Bends—11¼°, 22½°, 45°, 90°.

6"

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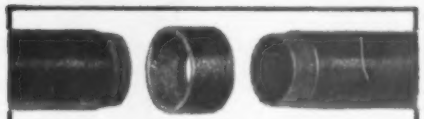
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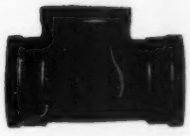
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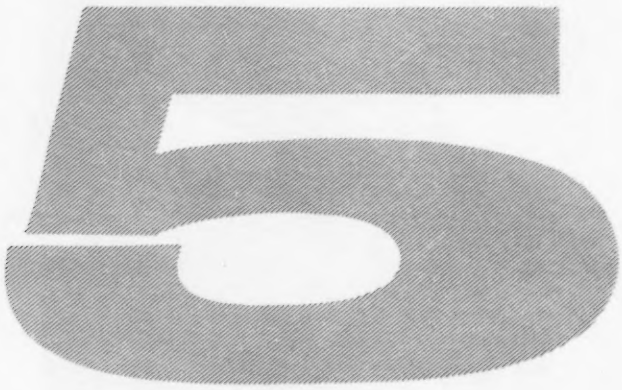
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The basic colours

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These are, then, the basic hues for all colours, if we add the degree of lightness or darkness of a colour to these four basic hues we have a means of comparing colours which is easily grasped.

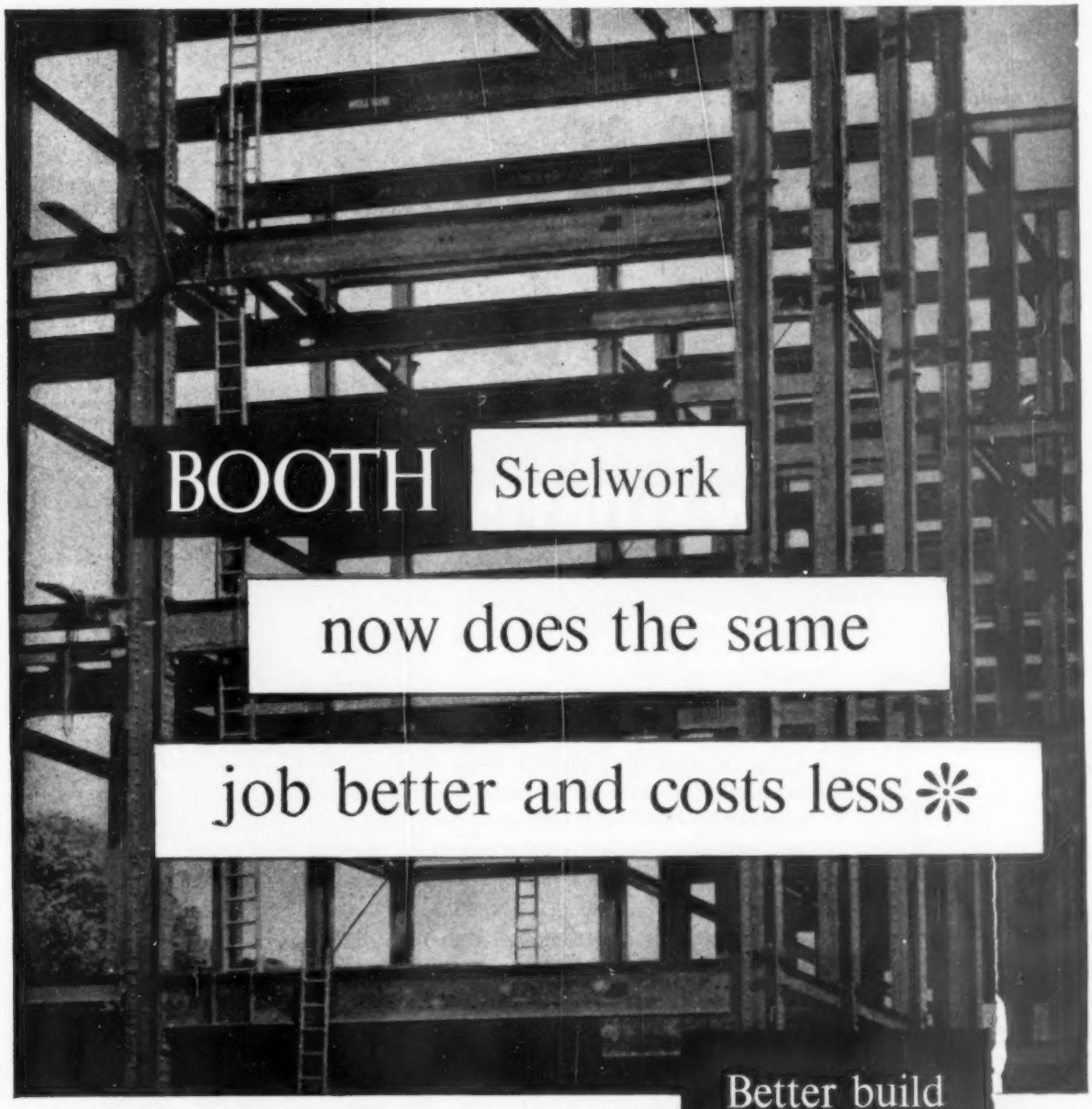
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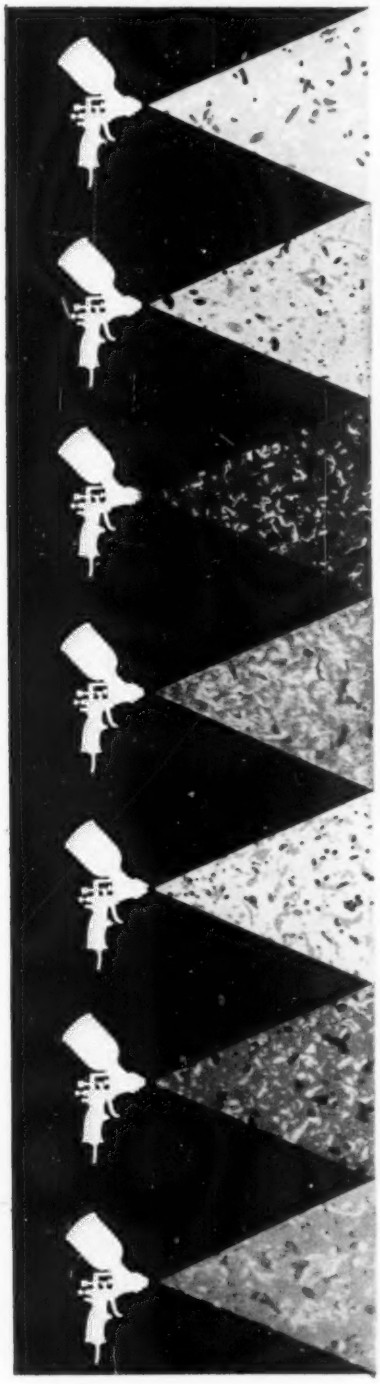
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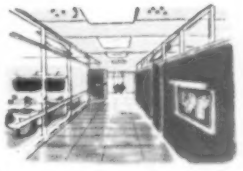
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THE ARCHITECTS' JOURNAL (Supplement), May 4, 1961

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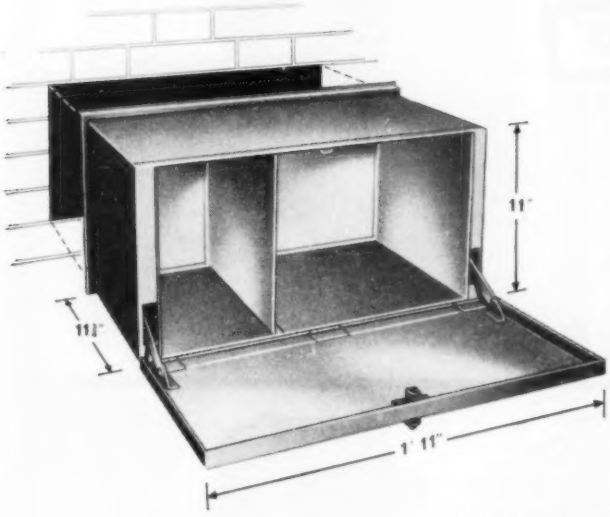
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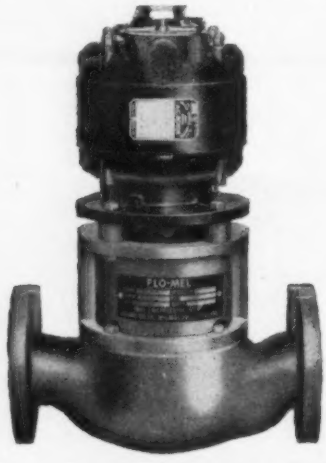
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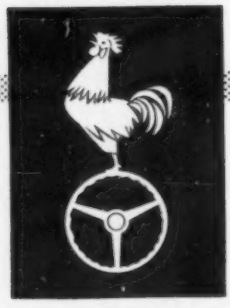


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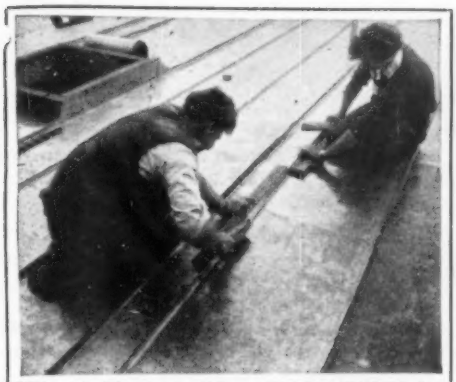


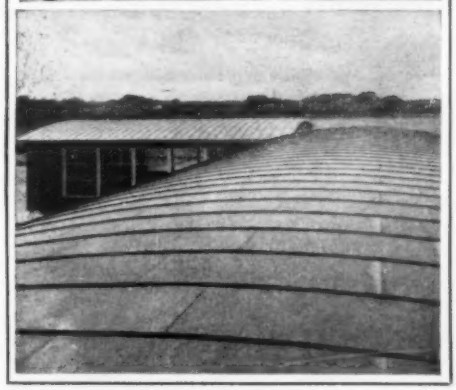
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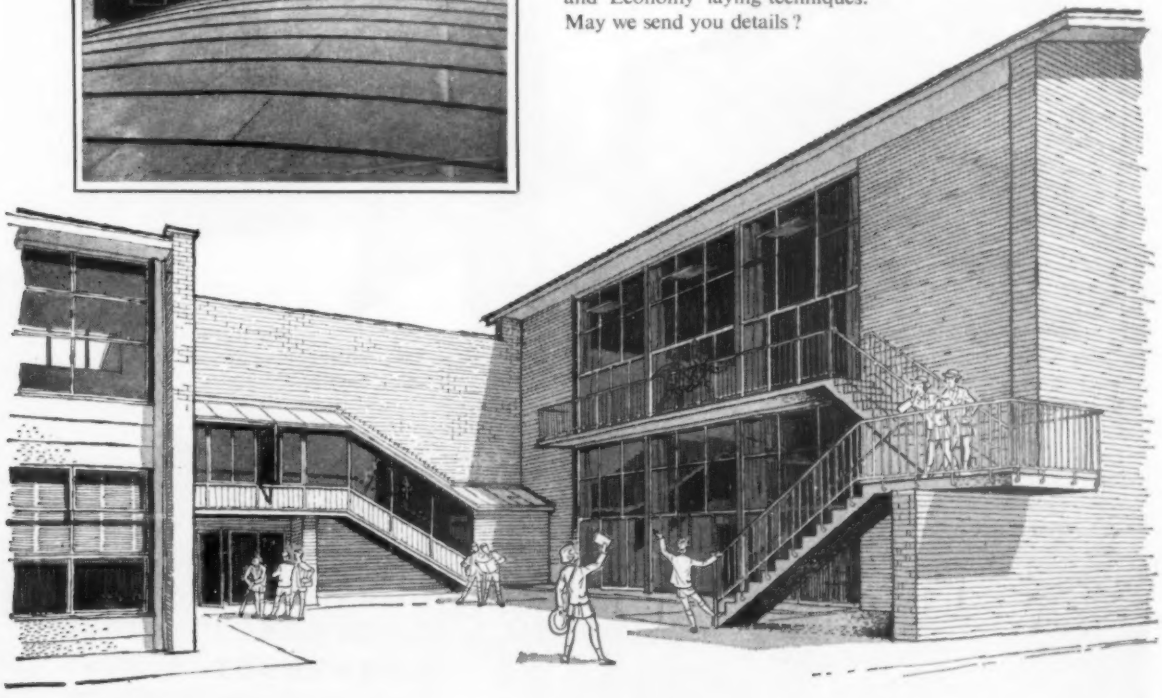
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Top left and Centre left : Duck Lane School, Bournemouth
Architect: Borough of Bournemouth Architect
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Architects : F. R. Bates & Sons and County Architect
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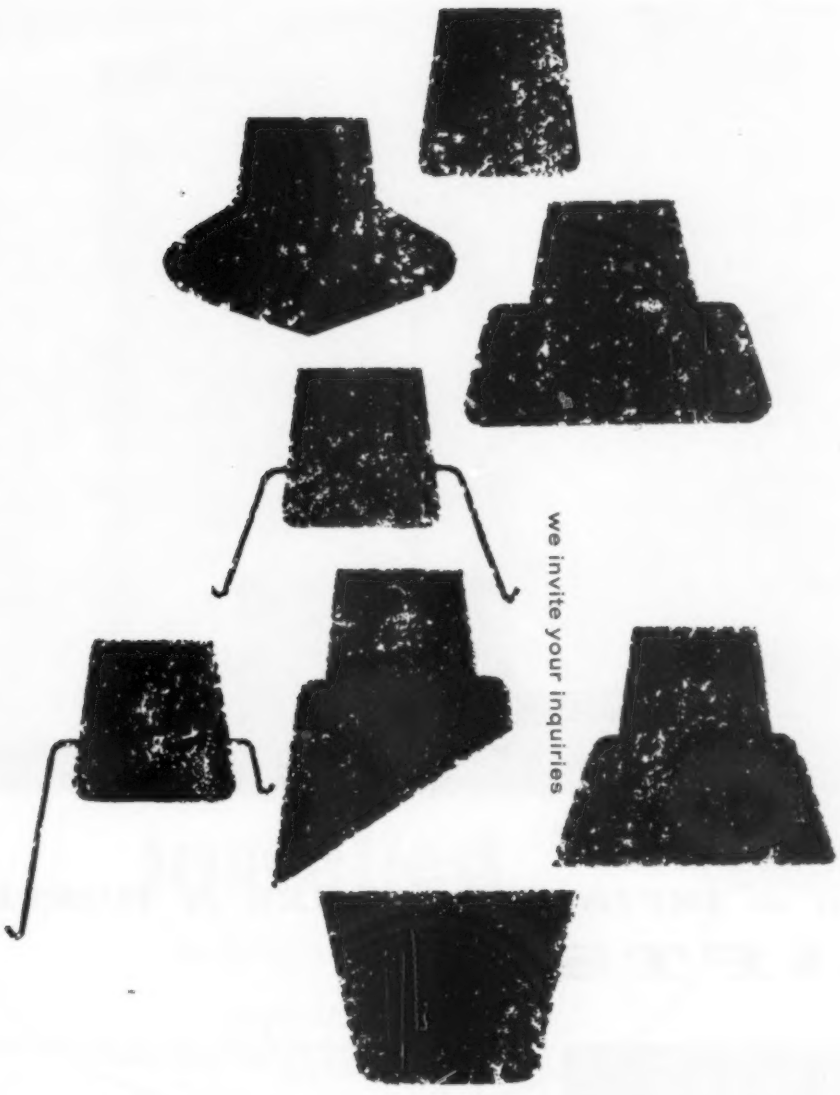
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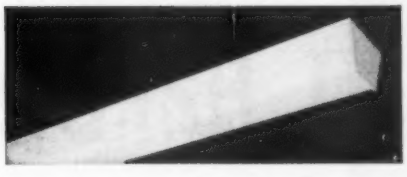
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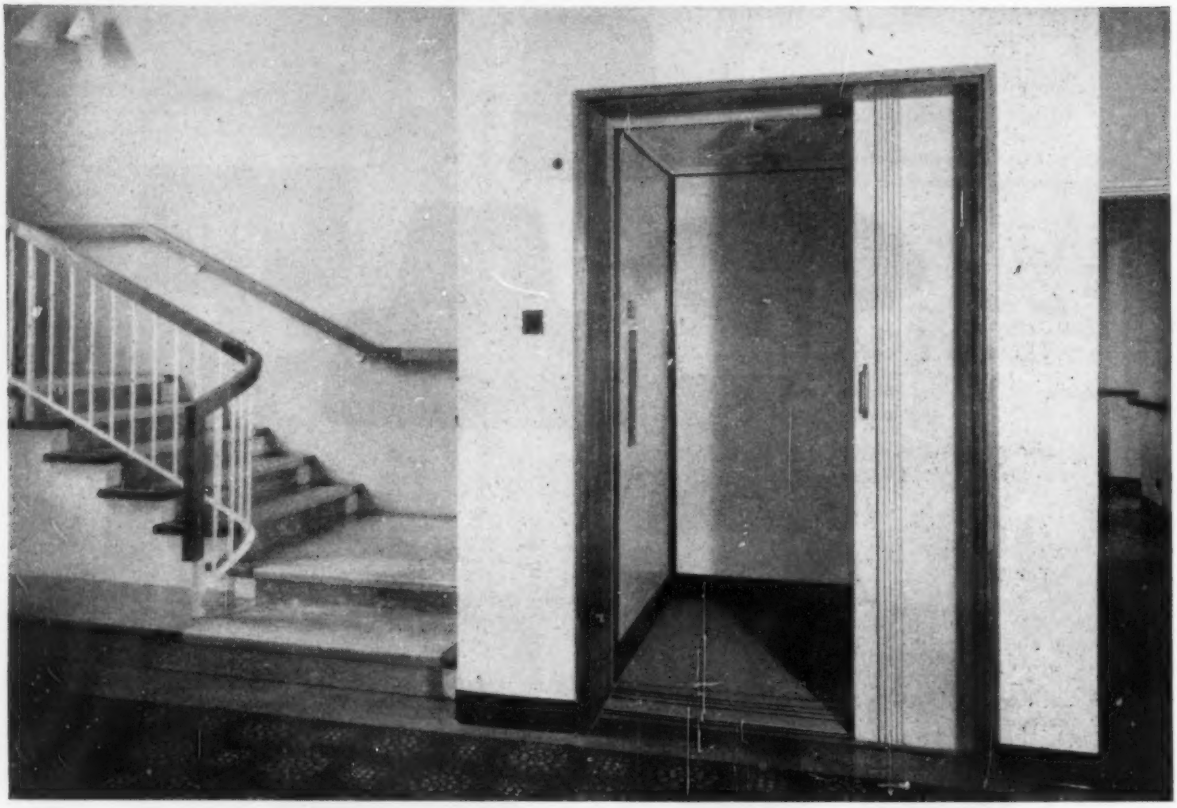
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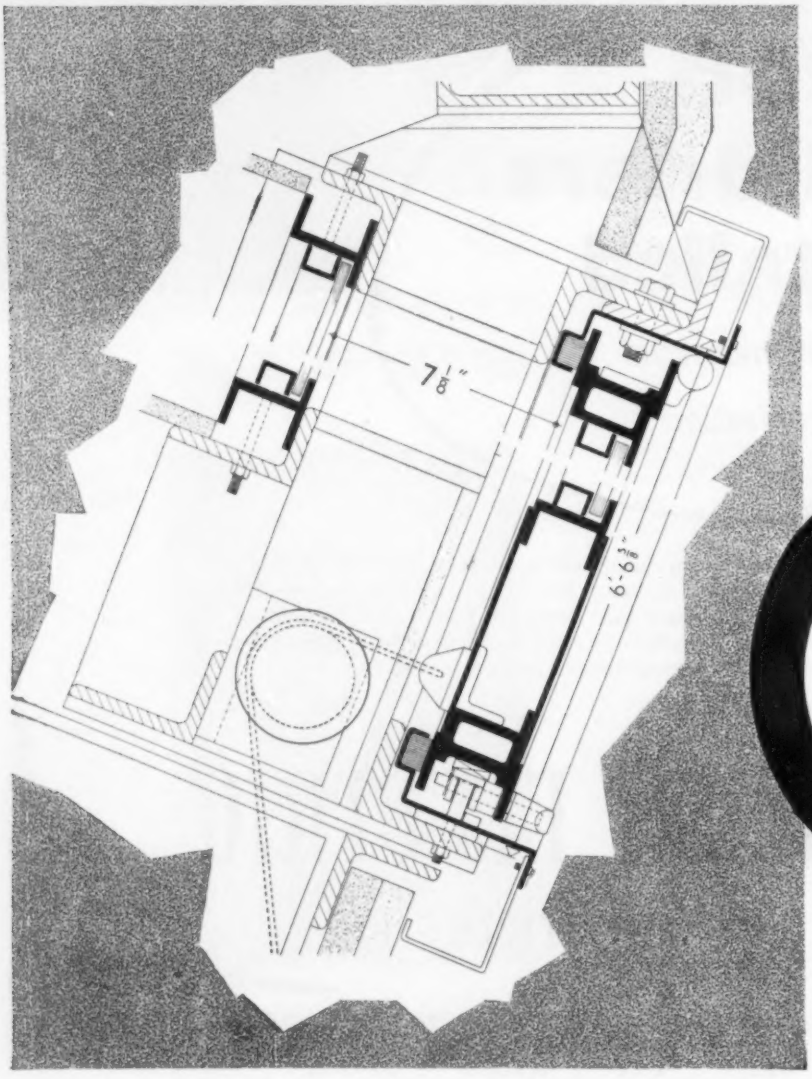
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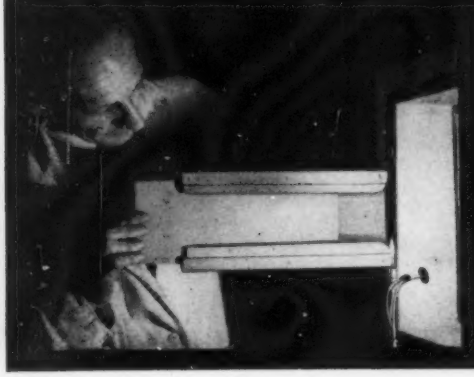
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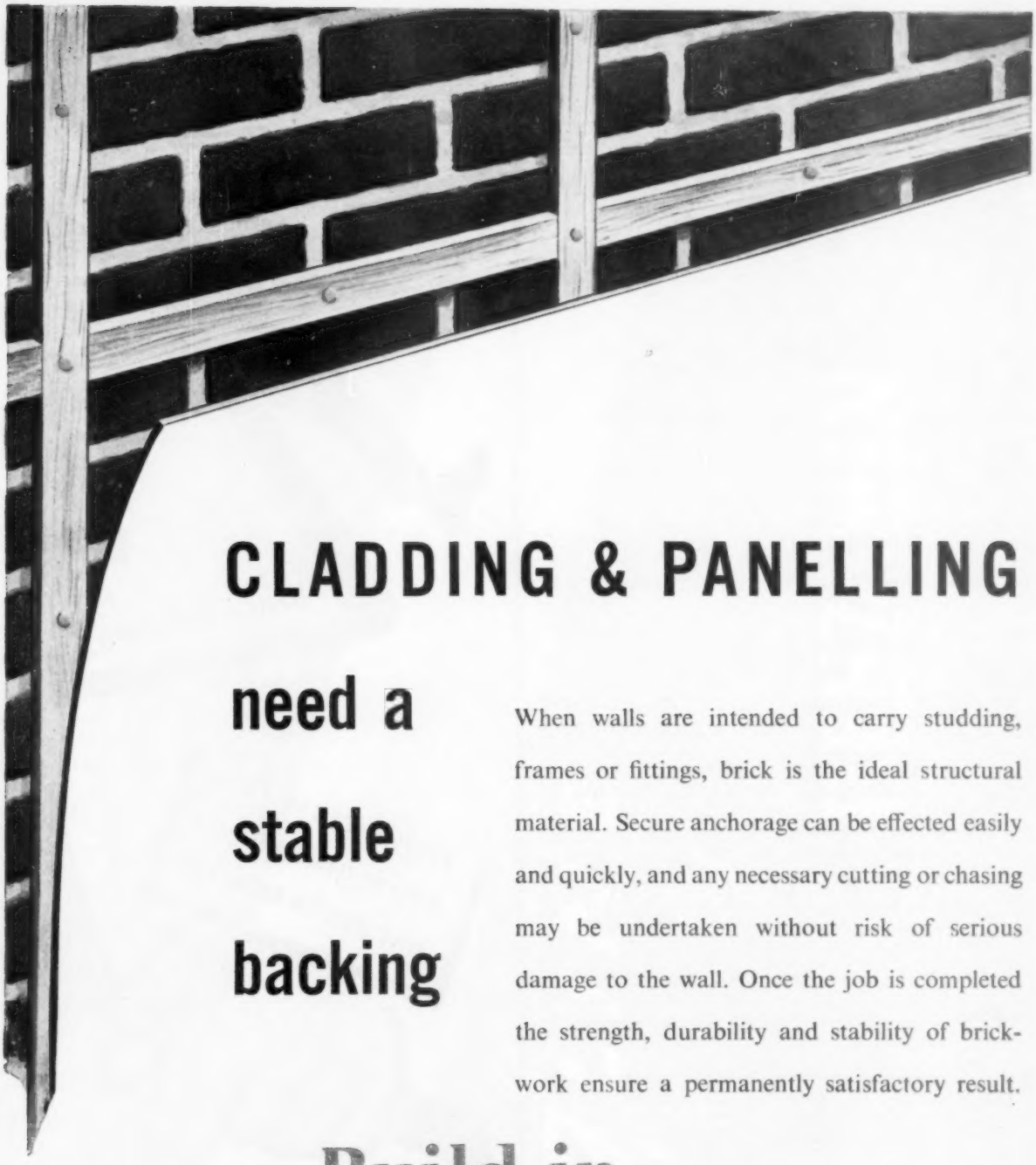
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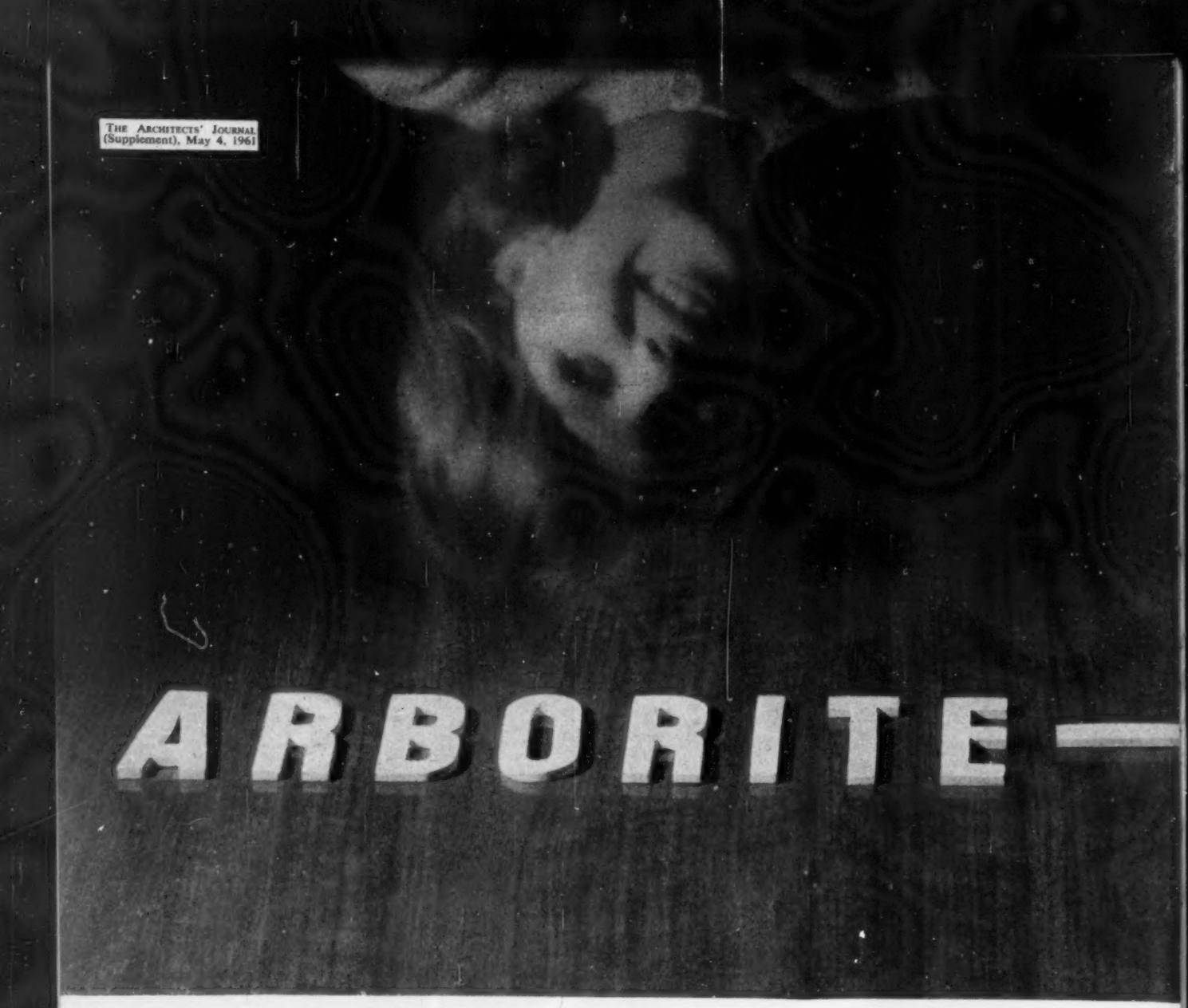
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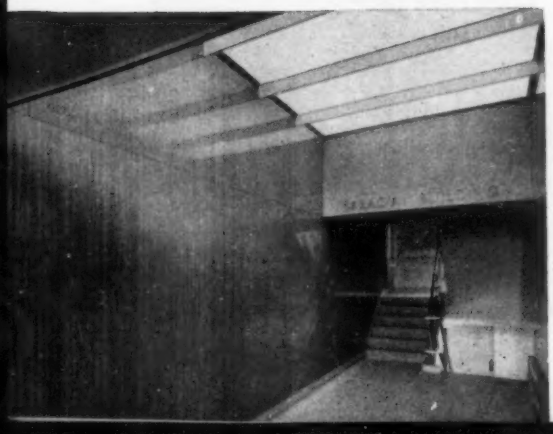
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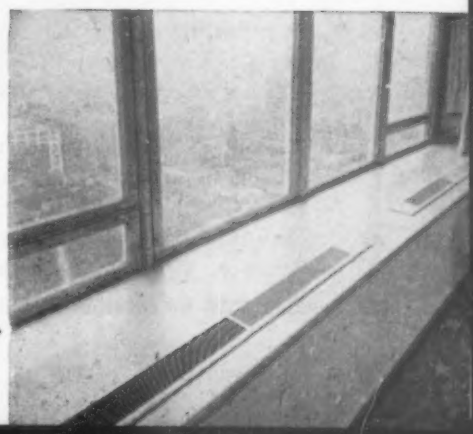
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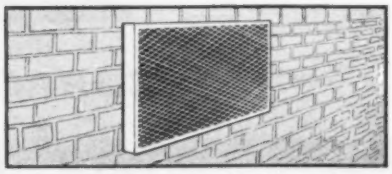
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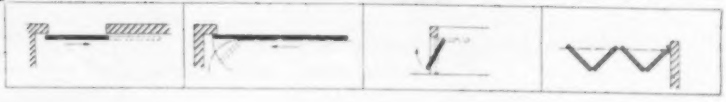
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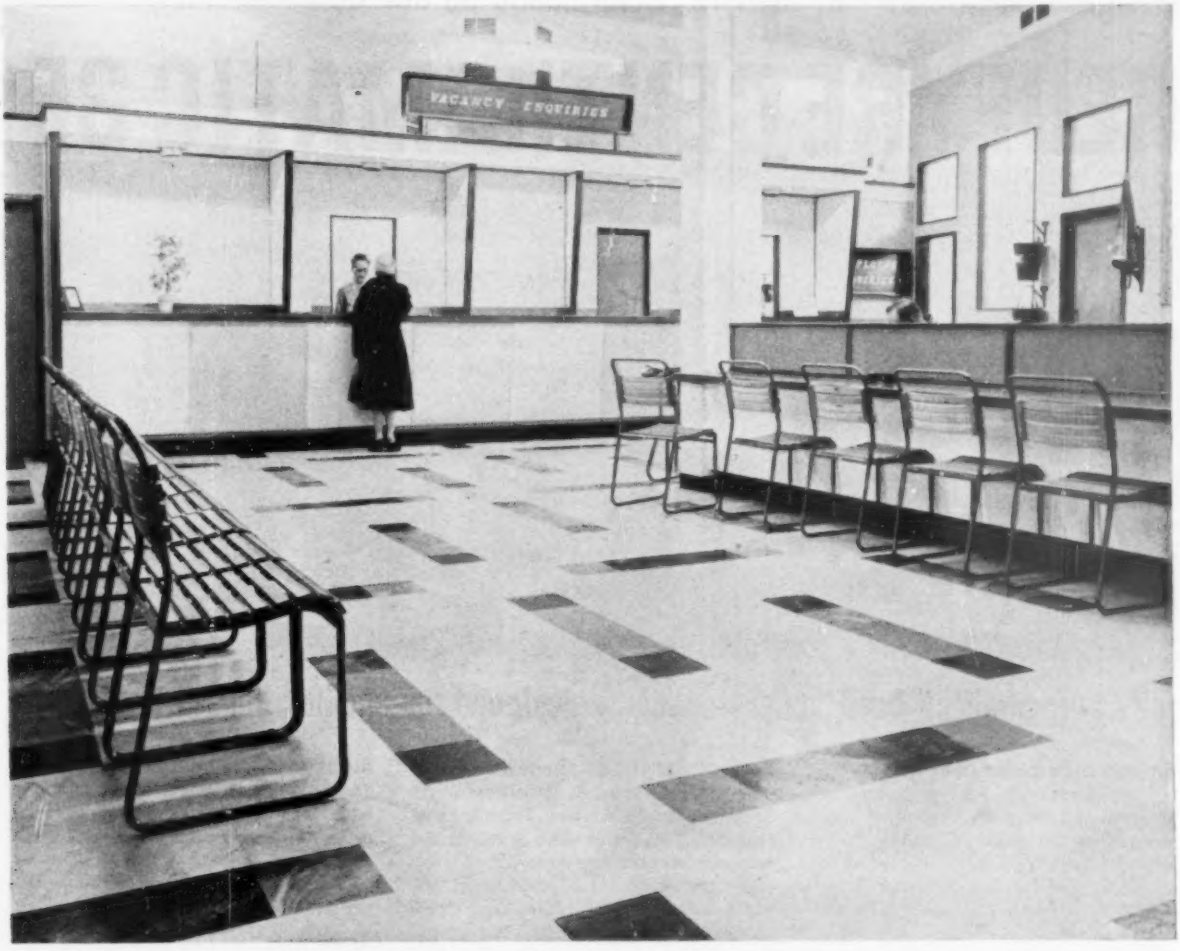
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Another tough, well-designed floor in 'Nairn' vinyl tiles— made from 'Corvic' I.C.I. vinyl polymer

E. K. Cole Ltd. specified hard-wearing, easy-to-clean vinyl tiles made by Michael Nairn & Co. Ltd. These tiles are made from 'Corvic' I.C.I. vinyl polymer, which ensures that the user benefits from the technical service given by I.C.I. Plastics Division to all its customers.

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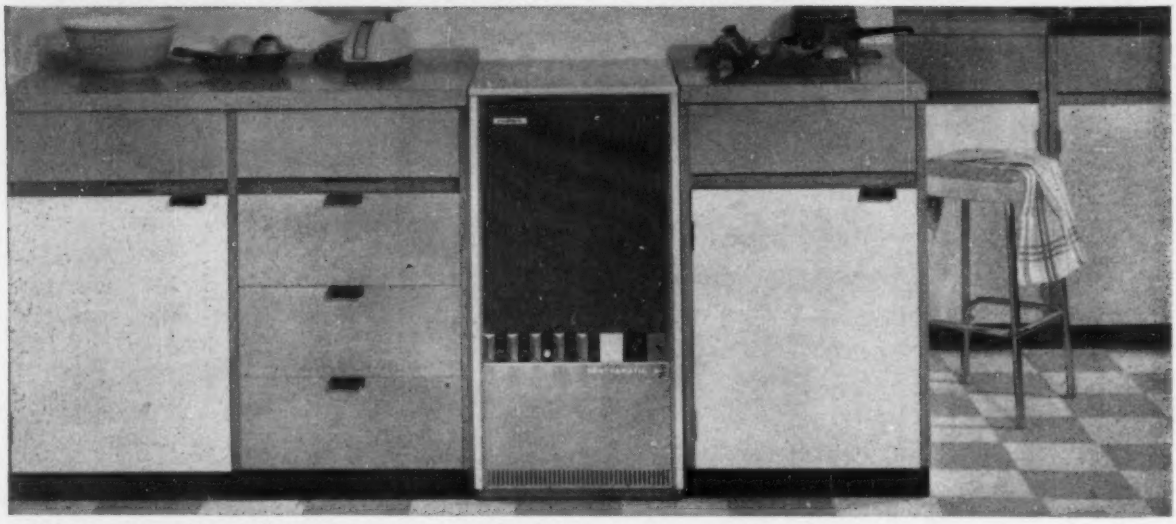
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REDFYRE CENTRAMATIC 35



fully automatic oil-fired boiler—specially designed for smaller houses

Unique automatic control system
Indicator lights on the Redfyre Centramatic 35 act as a constant reminder of the temperature selected by the user and the boiler is automatically operated to this setting by a sealed printed-circuit control unit. When the correct temperature is reached, the boiler switches itself off.

Exceptional fuel economy
When heat is needed the Redfyre Centramatic 35 lights itself electrically and reaches full operating efficiency almost at once. No pilot flame or low-pressure 'idling' to dribble away the fuel wastefully.

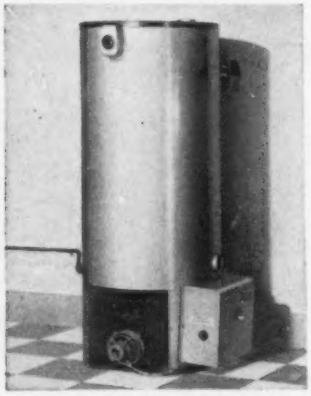
Perfect for the kitchenette
The Redfyre Centramatic 35 has dimensions to fit the smallest kitchen. The attractive enamelled casing is in white or cream; the bottom front panel is anodised aluminium; and for the easily interchangeable top front panel there is a choice of: Atlantic Grey, Nursery Blue, Eau-de-Nil, Flame Red, Cream, White, Buttercup, and Lilac. And because the 35 is totally enclosed, permanently installed, and fed with oil from outside the house, it is of course always safe.

Automatic combustion
The Redfyre Centramatic 35 does not rely on a good constant chimney draught to provide air for correct combustion. The fan on the unit does this and a 5" diameter chimney flue (top or back outlet) with some updraught is all that is needed.

Brief specification
Output — 35,000 B.Th.U's/hr. continuous rating (water transfer). Overall size — 36" high x 18" wide x 21" deep. Steel boiler with 1¼" B.S.P. tappings.

Retail price of the Redfyre CENTRAMATIC 35 is £89

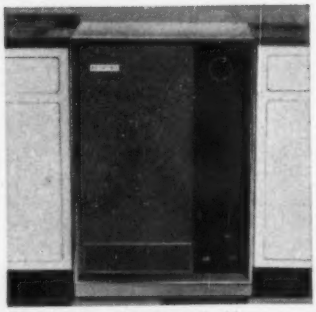
A REDFYRE CENTRAMATIC TO SUIT EVERYBODY



The Redfyre Centramatic 80

There are now three Redfyre Centramatics — the 35, described above, the 50 (50,000 B.Th.U's/hr.) price £128 (each of these models will fit beautifully into the kitchen) and the 80 (80,000 B.Th.U's/hr.) price £149. All three Redfyre Centramatics are fully automatic and suitable for use on either gravity or small bore systems.

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The Redfyre Centramatic 50

Newton Chambers and Company Limited, Redfyre Products, Thorncliffe, Sheffield

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An interesting new range of gas and steam heated cooking equipment will be displayed at a private exhibition at the Mayfairia Rooms, Bryanston Street, London, W.1, from May 9th to May 13th, and from May 15th to May 18th.

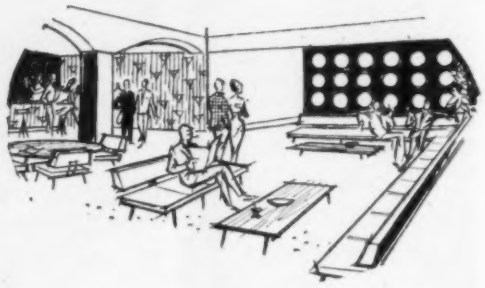
This unique range combines Moorwood's "purpose-made" quality with Vulcan Hart's streamlined design, and features in multiple form, Gas Ranges with a variety of efficient cooking tops, some hitherto unobtainable in this country, and large ovens with reliable variable thermostatic heat control and 100% safety shut-off. Also displayed will be two sizes of efficient Deep Fryers, Salamanders, Grills and Roasting and Baking Ovens.

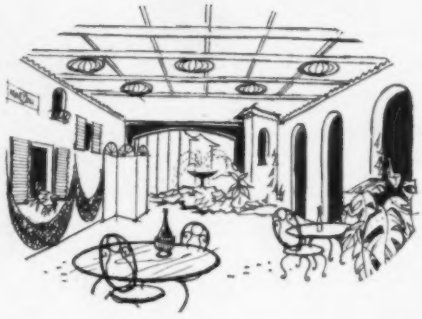
The equipment will be shown in two attractive external finishes, standard wrinkled black heat-resisting enamel with chrome trims, and polished stainless steel.

The exhibition will be open daily from 10 a.m. to 7.30 p.m., and from 10 a.m. to 3.30 p.m. on 13th and 18th May. Every facility will be made for your comfort and refreshments will be available.

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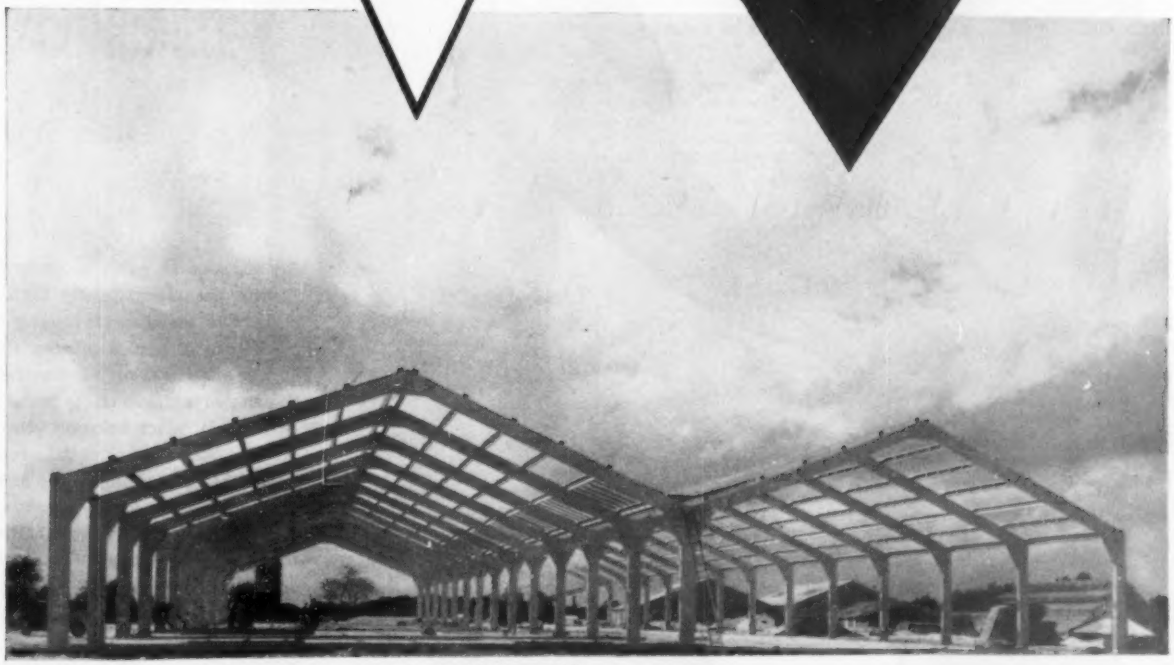
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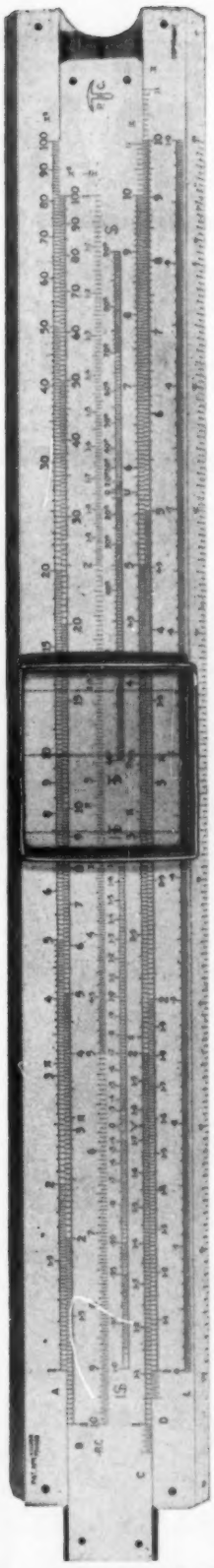
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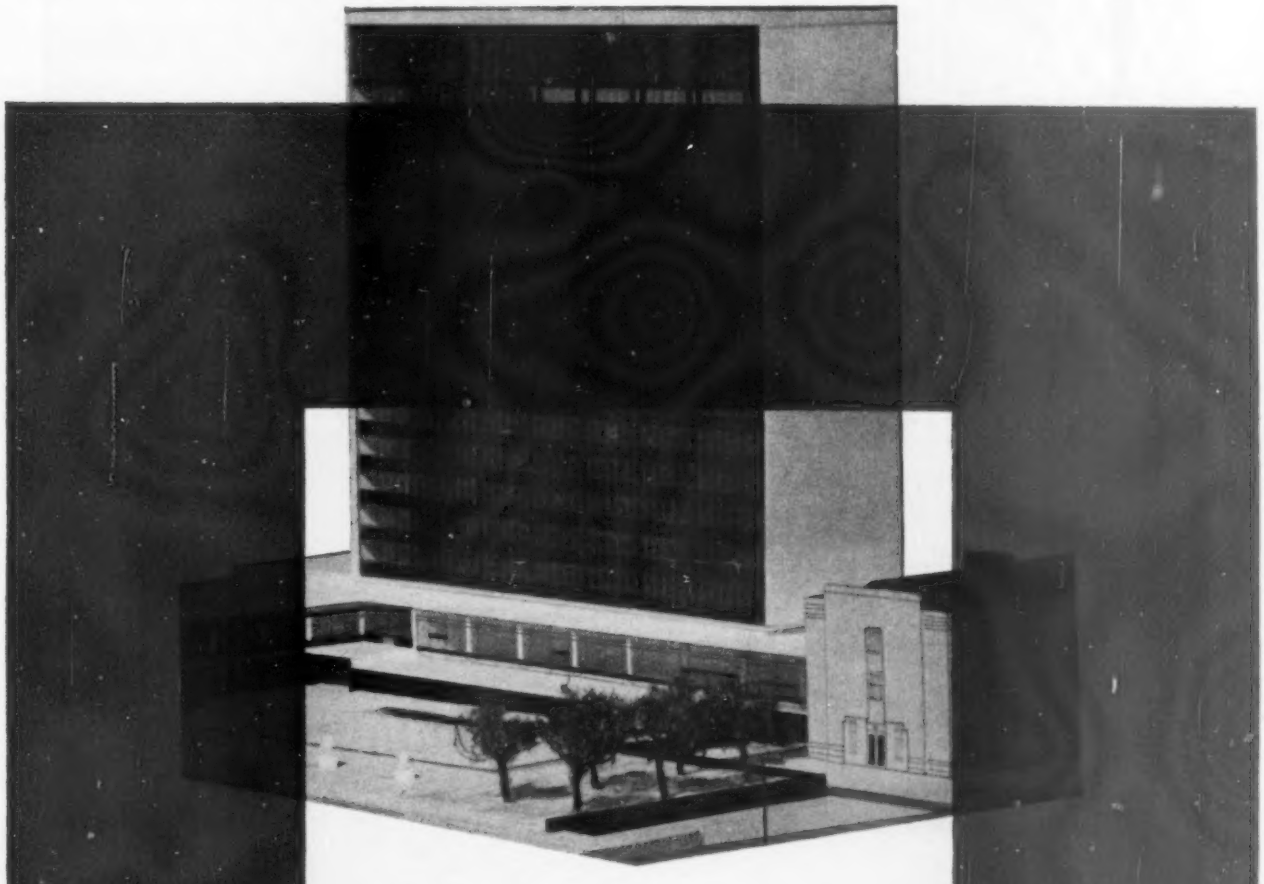
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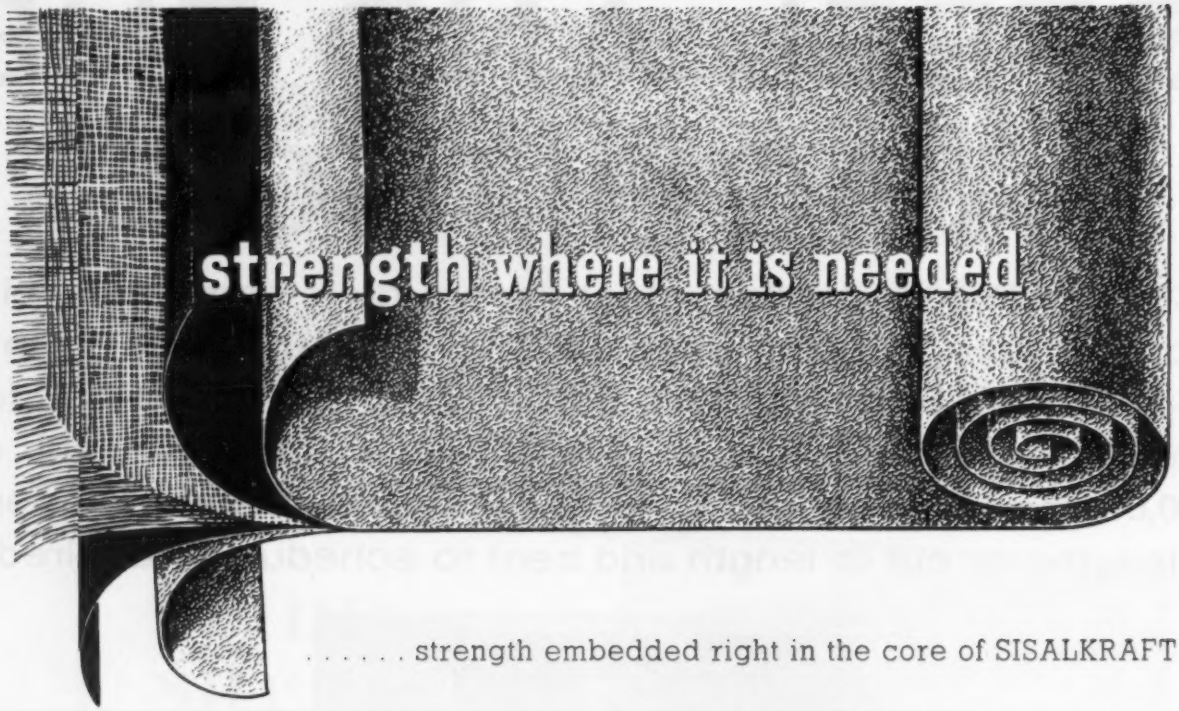
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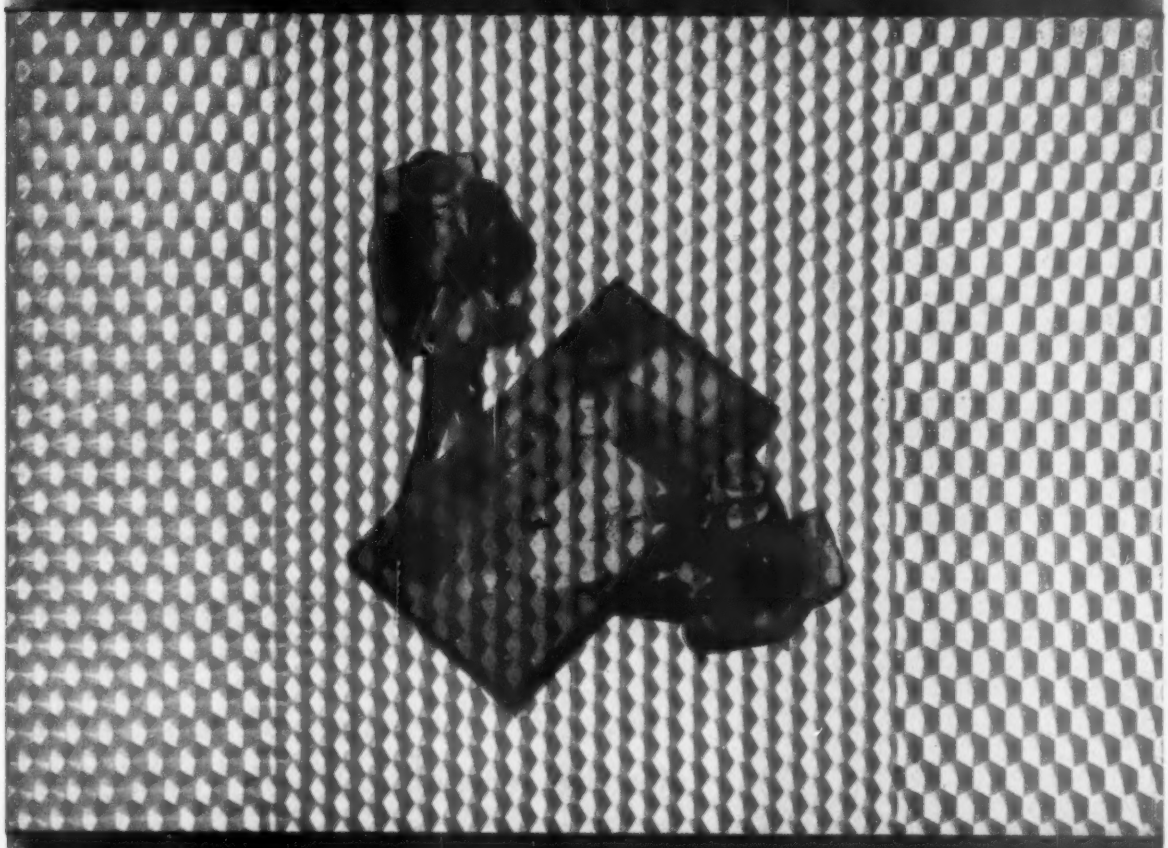
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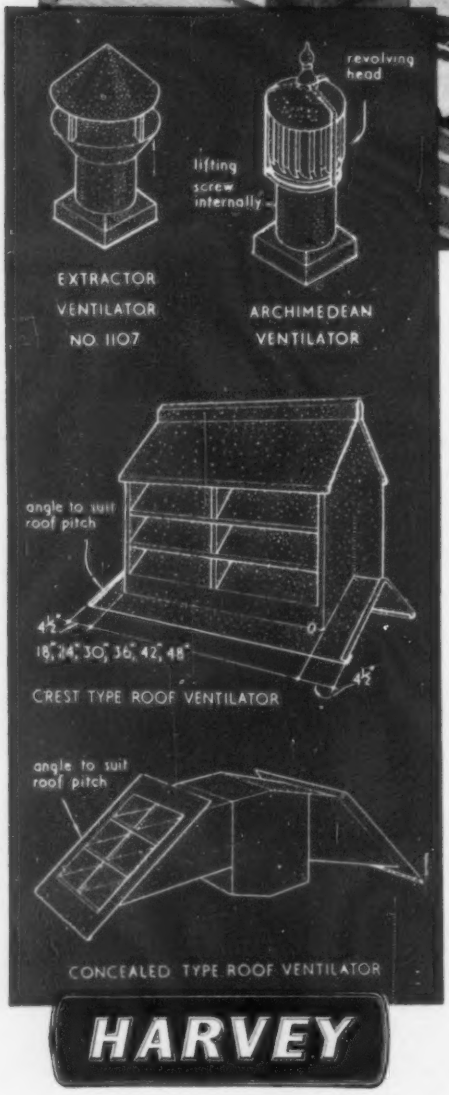
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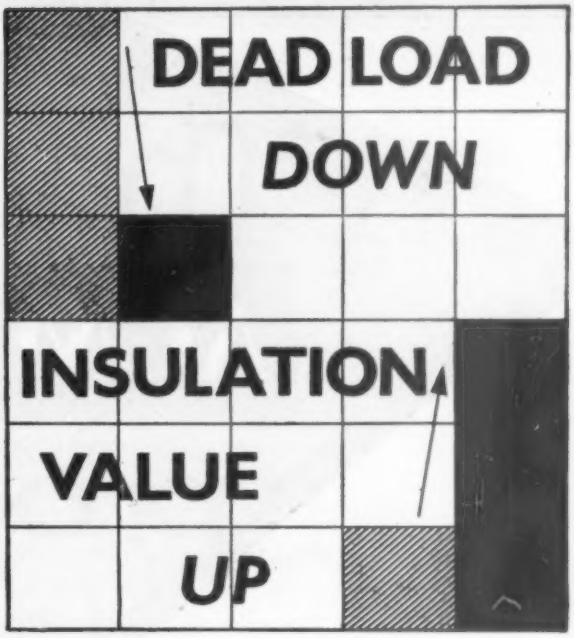
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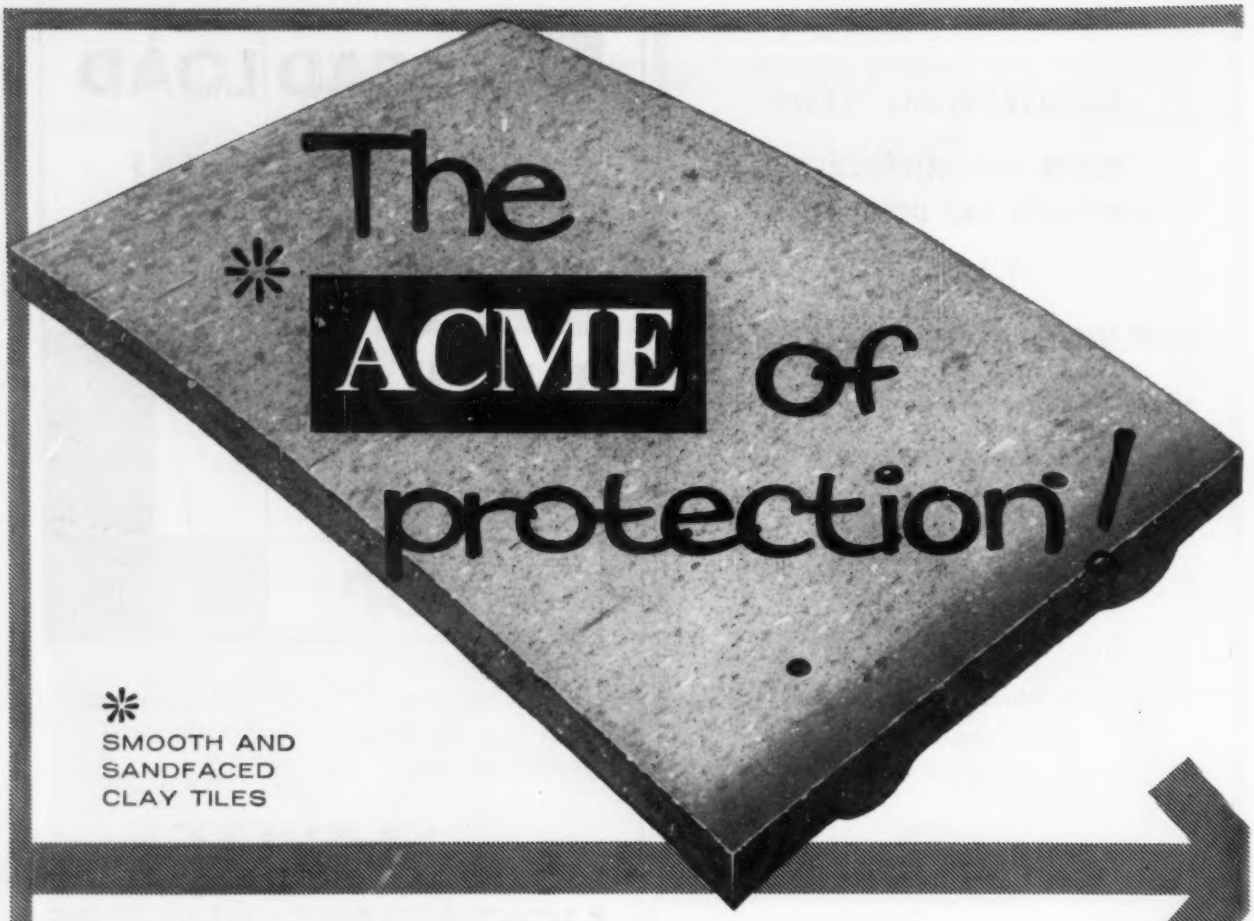
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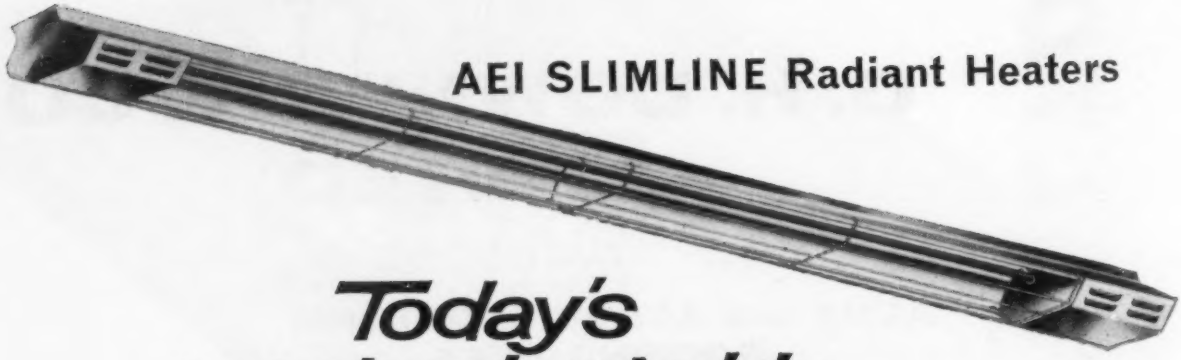
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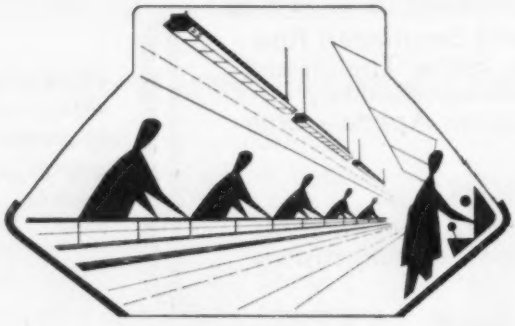


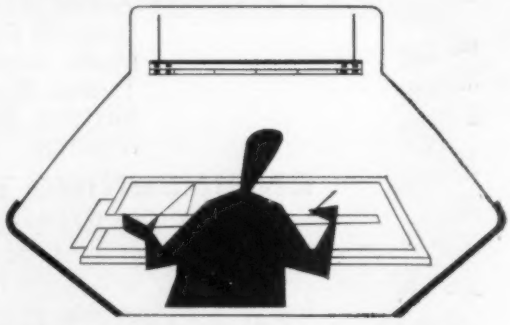
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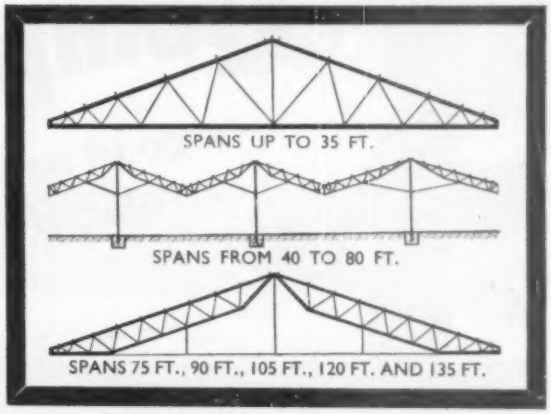
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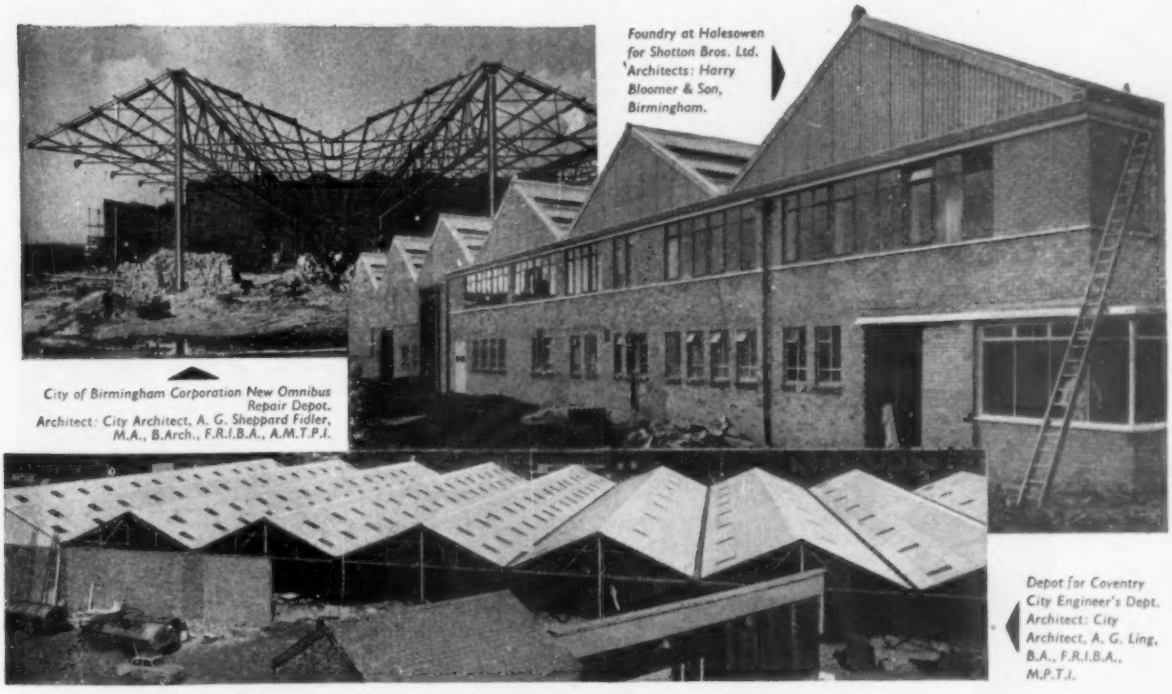
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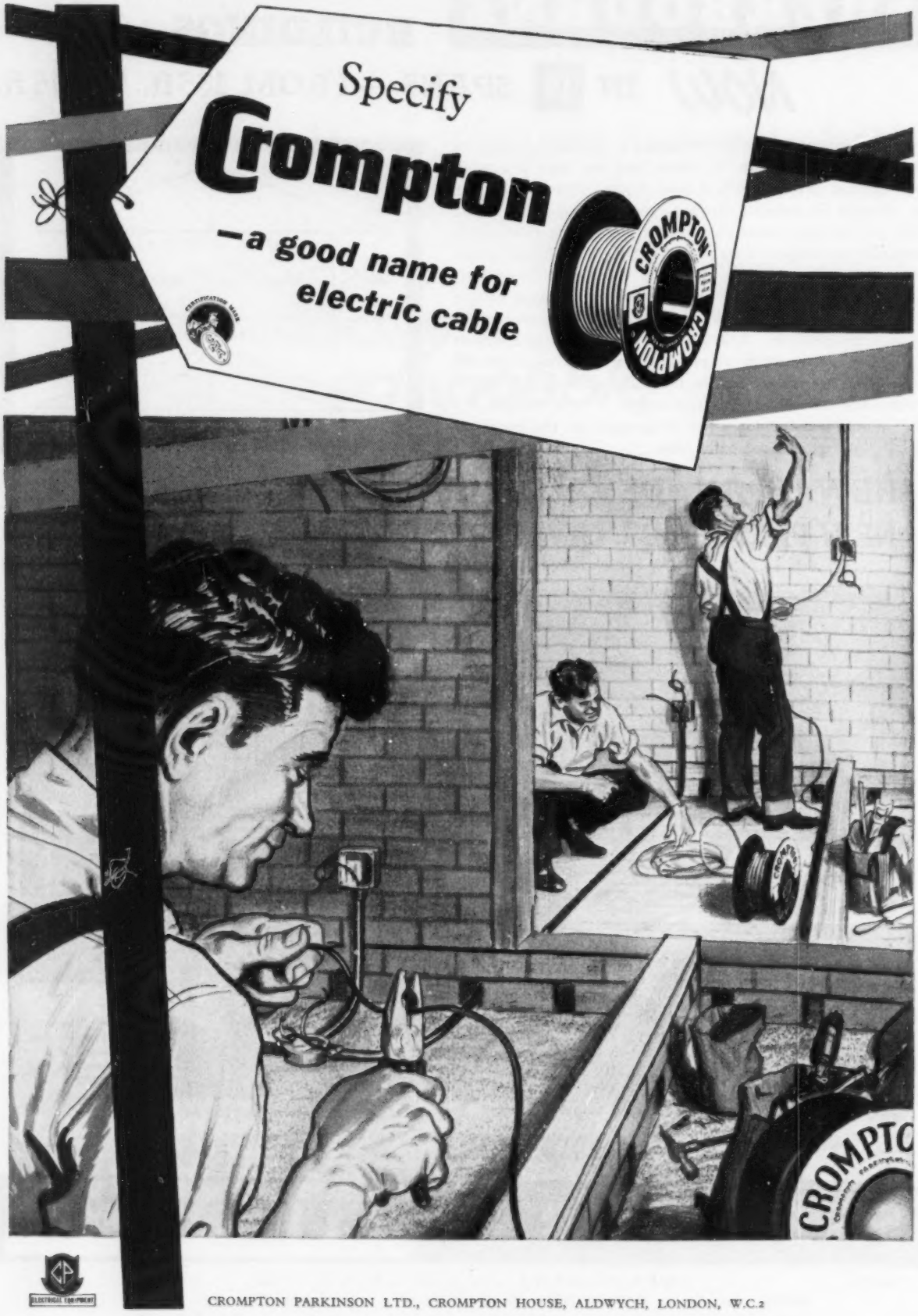
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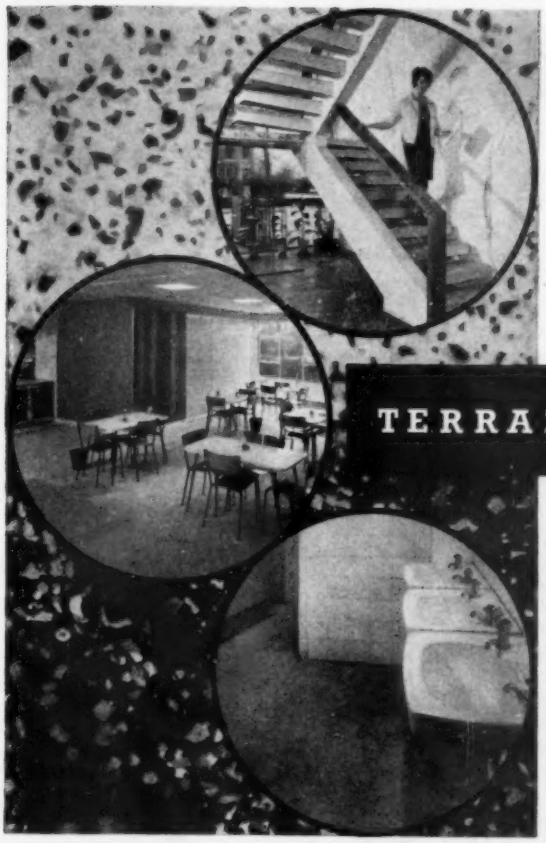
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Right Hand Illustrations: Staircase balustrade and cloakrooms using Terrazzite. Photos by courtesy of E. Seifert & Partners, Chartered Architects, London W.C.1.

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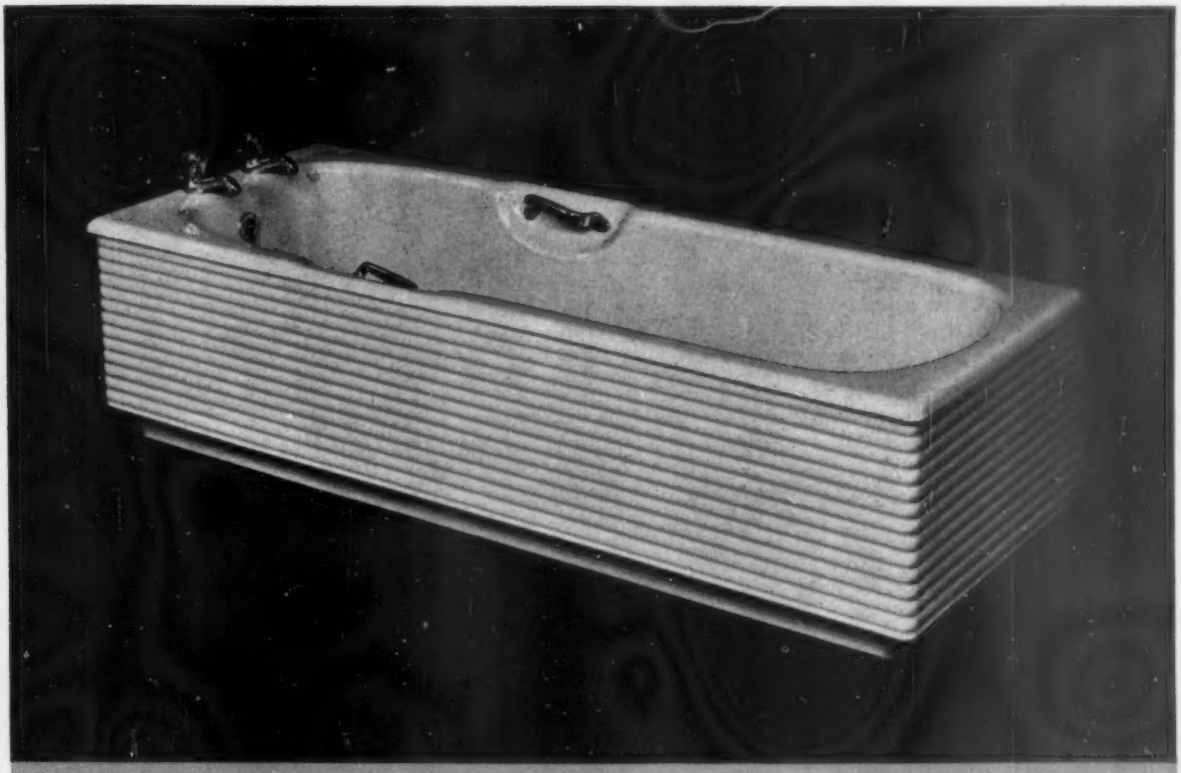


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The Architects' Journal
for May 4, 1961

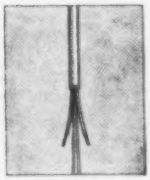
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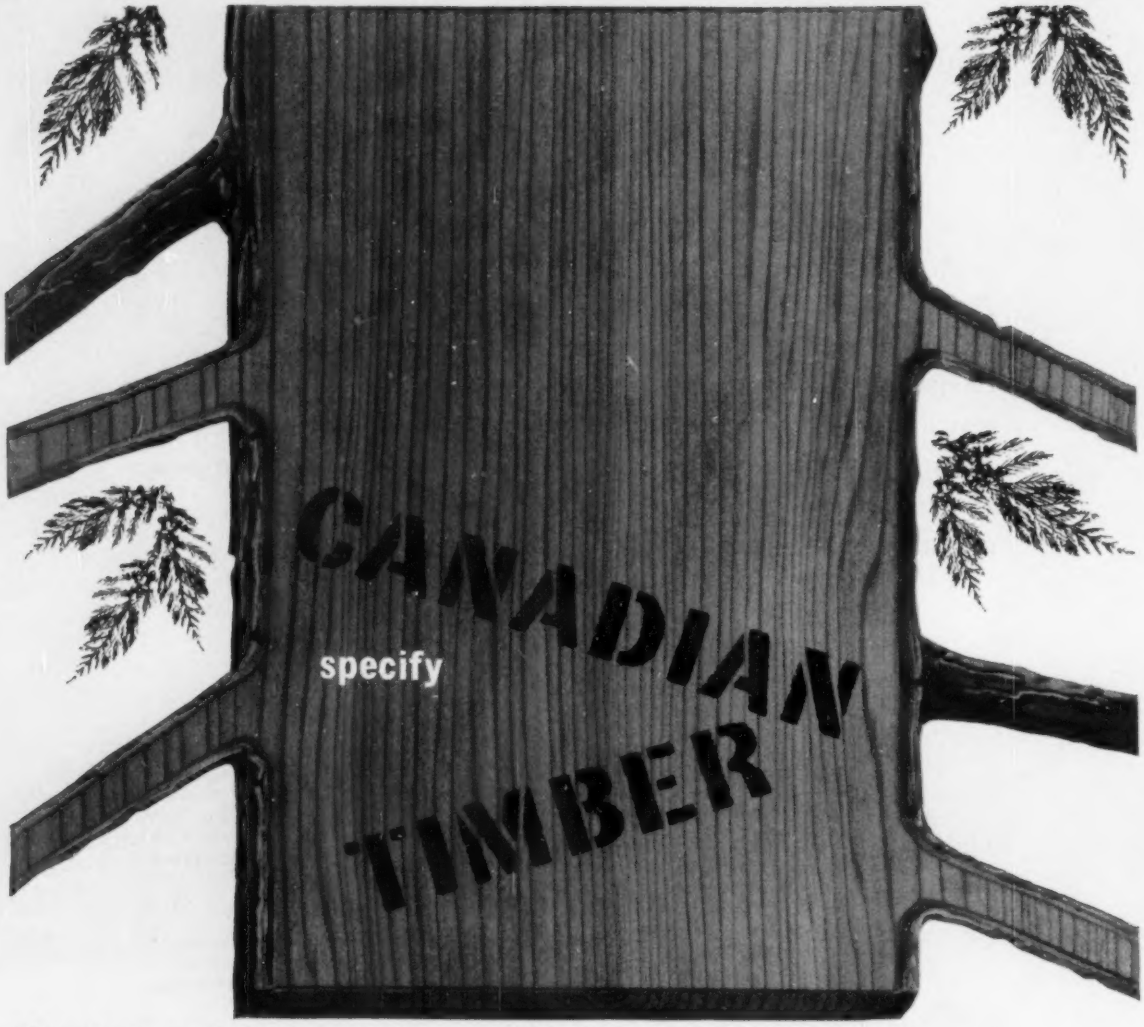


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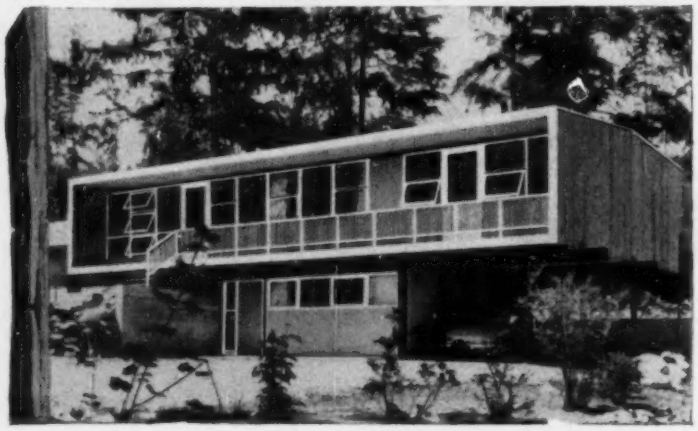
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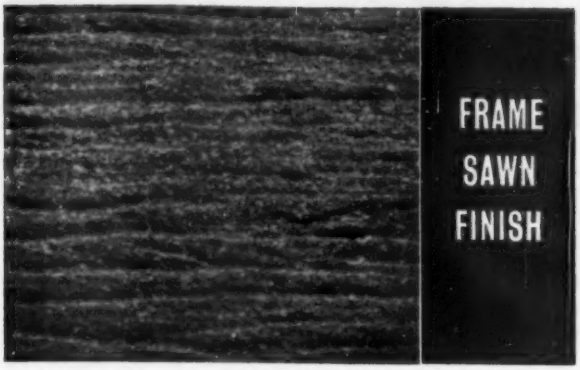
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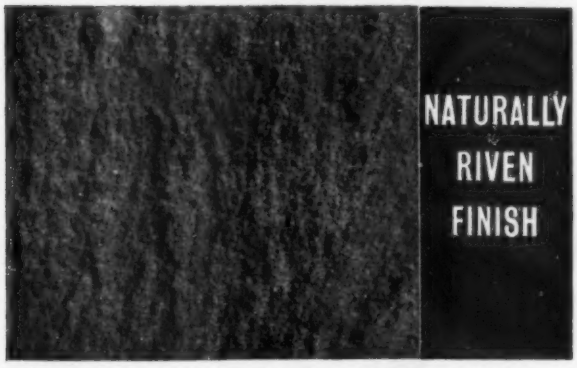
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AJ

The Architects' Journal

No. 3446. Vol. 133. May 4, 1961

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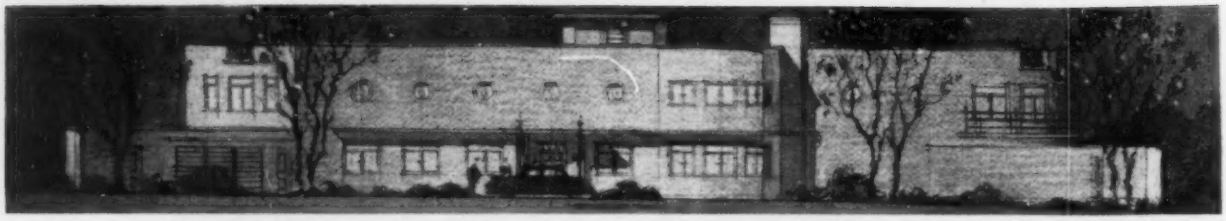
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NOT QUITE ARCHITECTURE

Counter-Attack, NY

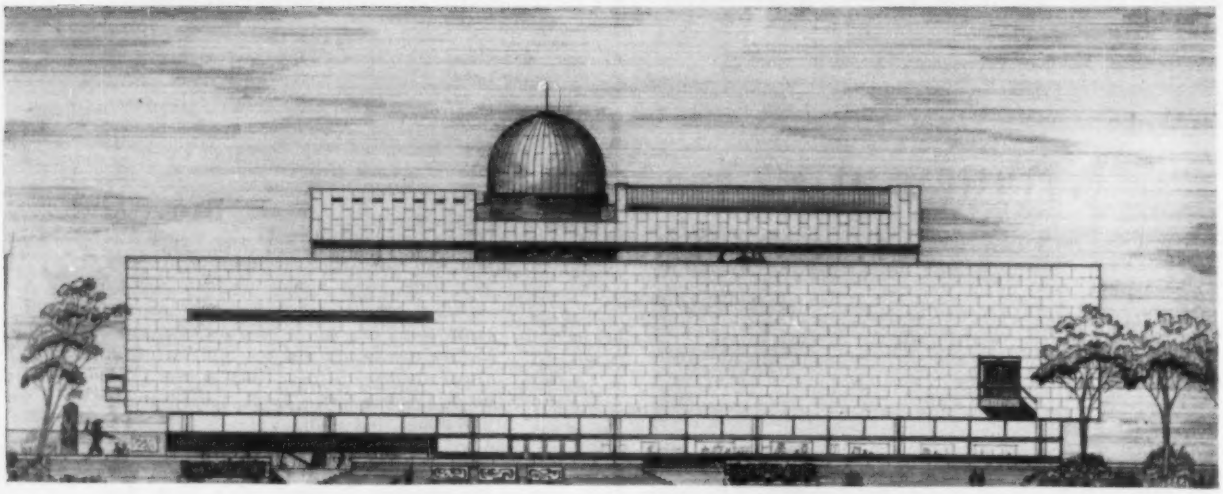
Madison Avenue was a disappointment—the only things that had been run up flagpoles were *flags*, and nobody saluting *them*; not a cookie crumbled, not a ball bounced nor a head rolled. Washington Square was a disappointment too. Certainly, there was the famous arch, and, obviously, at a bare 40 degrees temperature and a half gale blowing, you couldn't expect much ethnic song or open-air chess—though I did notice one real note of protest, a man, not dressed in a Beatnik kit, but leaning on an unmistakably *British* bicycle. But the real disappointment is that it is no longer a square. When you see how Harrison and Abramovitz's Catholic student centre (a routine curtain wall slab and a freeform, blind, brick auditorium on a routine podium) has demolished any sense of enclosure on the south side, you realise that the campaign to save the Square was not concerned with visual amenity, as most such British campaigns are, but with a simple battle between pedestrians and traffic.

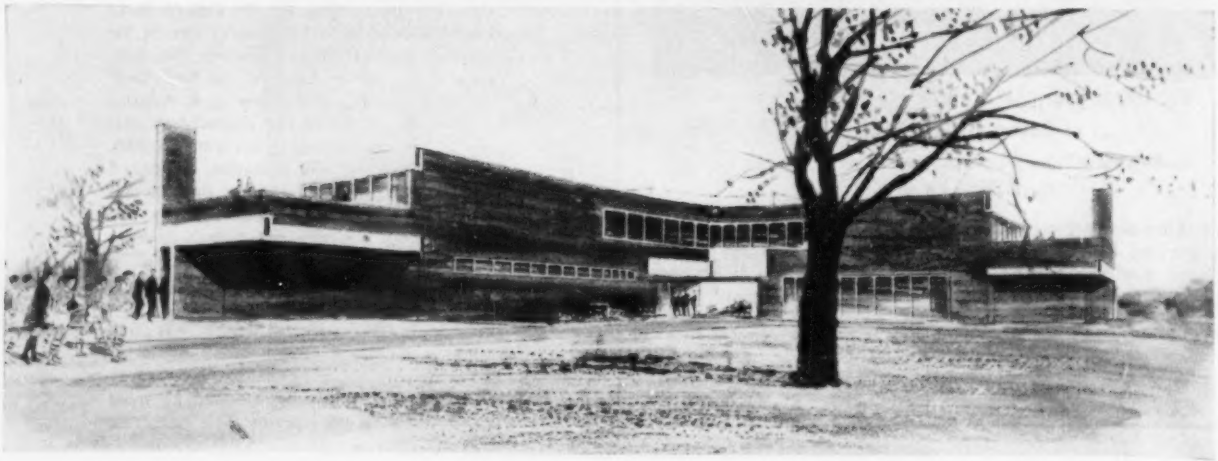
Simple, the man says. Actually, it involved some massive political manoeuvring, and also involves the death of a myth that most Europeans cling to—the idea of Parks Commissioner Robert Moses as one of the creative geniuses of the century. No criticism of the Moses that *was*—the New York Parkway system, what I saw of it, remains a triumph of roadscape engineering that few of the Autobahnen could compete with. But in 1958 he was proposing to run a major traffic artery slap bang through the middle of Washington Square into the southern part of Greenwich Village, and the Village rose as one man—30,000 petition post-cards is a very big slice of the Villagers. Beg pardon; rose as one *woman*, for the defence of Washington Square was first and almost last a largely distaff affair, as with the campaign against car-parking in Central Park, which was stopped by mass rallies of moms with prams. The embattled



Full Circle?

Something fresh you cannot help noticing about the usual mixed bag in the architectural room at the Royal Academy is the way in which younger architects moving backwards (what Pevsner recently defined in a state of alarm as "the return to historicism") have now gone far enough to find themselves quite near to alignment with the older generation who have always designed that way. These three designs tend to make the point; top, Prospect House, Brook, Surrey, by Philip D. Hepworth; centre, a museum, Kingston-upon-Hull, by Frederick Gibberd; and bottom, a new boys' house for the Royal Philanthropic Society at Redhill, Surrey, by John Wright. For further comment about the exhibition, which opened last week until August 13, see page 638. If you do go, by the way, head straight for gallery VIII, where there are actually some paintings which look as if they had been done in the twentieth century.





matriarchs of the Village versus Moses were Shirley Hayes, first in the fight and long regarded as eccentric, Jane Jacobs, currently fighting a Victor Gruen scheme to urban-renew her beloved Hudson Street, and—among others—Mary Nicholls who seems to have been the most instrumental in making the *Village Voice* an effective weapon in the battle. Funny about the *Voice*—it has become legendary in Europe as one of the Feiffer's first outlets and is otherwise regarded as a Beatnik organ, but, in fact, it is one of the most intelligent and wide-awake community newspapers in the English-speaking world. Hampstead and Chelsea papers please copy.

What the fighting ladies were defending was not a scene, but a certain acreage of open space in which kids could play and prams be pushed, the natural focus of village life, and, also, a natural bulwark between Mid-town and Down-town. Had Moses got a traffic-run through the middle he would have been creating, for certain interested parties, the chance to develop properties that had Fifth Avenue addresses and Village addresses at the same time—which would doubtless be as profitable as a simultaneous Bond Street and Chelsea address, but would have been a sham because the Village would have been destroyed by the road. (One observes some highly speculative new apartments by the South-East corner of the Square—a bit premature perhaps?)

Round One of the battle was won in 1958—the Square was closed to all (except emergency) traffic. Fifth Avenue buses—proud galleons of the grid-plan Main—still come past the arch to turn round inside the Square. This looks natural to me, but is regarded as the thin end of the wedge locally. The trouble is that Round Two of the battle has still hung fire—although traffic has been stopped and Moses has been kicked upstairs to run the next World's Fair, three years of arm-twisting and threats have not made his successor draw up a new planning map that does *not* show a future road through the Square, and so the way is still open for non-Village interests such as New York University, to re-open the battle any time it likes (NYU has an attitude to its property on the Square very similar to London University's view of Bloomsbury before the Leslie Martin plan).

•

Battle proceeds, and a new one is blowing up over the Wolfson, Cotton, Gropius and Belluschi project for Grand Central Station. As soon as you see the site, you realise that only an idiot would want to put the world's largest office-block on a piece of ground so ill-provided with traffic outlets, and no amount of casuistry can excuse Gropius's part in a scheme that makes Piccadilly look almost sensible. A few years ago everyone would have thrown their hands in, but now that the ladies have shown that you *can* beat City Hall, it's up to the men (headed by Doug Haskell of the *Forum*) to show that you can beat big business too. Perhaps the Civic Trust would like to organise an expeditionary force to show New York how it is done?

REYNER BANHAM

The Editors

THE RIBA CHARTER

ONE of the points about the proposed revisions to the RIBA bye-laws, which were considered at a special general meeting last week, is that they have had to be framed within the wording of the Institute's Charter. It thus seems, at least for the moment, that the RIBA Council have no intention of changing the Charter, and probably are reluctant to do so. This is very understandable, since we gather that the process is liable to be long, involved and extremely expensive, and that the changes proposed need not necessarily be accepted.

Nevertheless, we wonder whether the time will be approaching soon when the RIBA will have to screw up courage to make some changes, because the present one is getting too out of date. It is interesting to note that the 1887 Charter was revised in 1909 and 1925, so that the time span since the last alteration is the longest in the present century. There is, for instance, the question of the different classes of membership. The Licentiates will, of course, eventually disappear as a class, and this should presumably be dealt with in due course in the Charter. There are also certain limitations about some of the Institute's officers having to be Fellows, which may become awkward if this class of membership continues to decrease in number. Should the Institute ever consider that students should be allowed to have some say in its affairs, then again the Charter would seem to need revision.

But the main worry we have is that the relationship between the bye-laws and the Charter is, on the face of it, in some places inconsistent. This is no reflection on the Constitutional Committee who have been responsible for the current bye-law revisions, since such inconsistencies have grown up through the years, and are just as evident in the bye-laws at present in force. One of the more striking instances is in the case of Council elections. While the postal ballot has now been in effect for some time, the Charter still says that the Council is "to be elected at a General Meeting of the Royal Institute . . ." in a manner described in the bye-laws. We are always in favour of people being able to circumvent regulations where the intention is well founded. But is the Institute quite sure that some completely misguided member might not create trouble out of this sort of situation, even to the lengths of a legal action? Even though the bye-laws have just been combed through and brought generally up to date, it would seem to be a good moment now for the RIBA to re-assess its policy with regard to the Charter, since revision is such a long and technical process.



NEW PRECEDENT

The first post-war-qualifying architect to become president of the AA is Michael Austin-Smith. ASTRAGAL reckons that his protest at the RIBA's special general meeting last week about the AA's representative on the Council being thrown out (to the smug delight of those jealous of the AA's tradition of progressiveness) augurs well for the future.

*

Last week quite a reasonable discussion emerged at the AA on the possibility of testing building materials and products by the Consumers' Association, the publishers of the invaluable "Which." The Association are considering a quarterly publication printing the facts about six products per issue, and a provisional list of 350 items has been drawn up. They only expect 10,000 subscriptions from architects and builders, so fees could be from 10 to 20 guineas.

*

Most of the audience, ASTRAGAL guessed, were keen on the idea of a Building "Which"; Peter Newnham thought the 10 guinea charge very little in order to learn which materials really work, and Oliver Cox, probably the only architect to have had experience of tests (at the LCC) was strongly in favour.

One speaker raised a point once made in the AJ: Why not make it obligatory for all manufacturers to publish the performance of their products? Oddly enough both the representative of the Consumers Association, Caspar Brook, and David Vickers of BSI thought this perfectionist, unnecessary and an intrusion on freedom.

SEE WHAT TWO CAN DO

Frank Yerbury always seems to have to have lived twice as long and done twice as much as everyone else, so it seems only appropriate that when he relinquishes the post of Director of the Building Centre at the end of the year he should be succeeded by two men: Gontran Goulden and Robert Nott. ASTRAGAL'S good wishes to all three.

LONDON BUILDERS

A London Master Builders' lunch for the Lord Mayor sounds a routine, formal occasion, but last week it was an unusually enjoyable event, with excellent food, and a masterly survey by president R. F. Mansell of the industry's problems to which Lord Mayor Waley-Cohen added a few more. Mansell extolled firm price tendering, maintained that we were catching up in speed of building with the Americans, deplored the way building regulations limited advances in new techniques and materials, and wanted architects, surveyors and builders jointly trained in "a sound scientific education."

*

Not to be outdone, Waley Cohen asked for: higher pay for real skill; better respect for the work of other trades; tenders written in easily comprehensible English; greater speed in building (unfortunately he instanced civil engineering) and finally, "I have been staggered and horrified how the routine installation of an oil heating unit is regarded as a mystic science by all concerned"—well said.

A PEER AT PLANNING

Anthony Wedgwood Benn, alias Lord Stansgate, has conducted an unusual campaign for the seat he wants to win *and* occupy for South East Bristol. Instead of the usual superficialities which pass for political speeches he has organised appearances by guest experts on particular problems. By doing so he has focused more attention on town planning than any other candidate in history or, at least, in my knowledge of it. His supporters have included Richard Llewellyn Davies, Sir Basil Spence, Percy Johnson-Marshall and Edward Carter—and he has had backing from the Bristol Architects Forum, which laid on an exhibition of local replanning.

TIERS, IDLE TIERS

Lewes council has decided to adopt a modern approach to housing layout and fittings. If you don't think that a pity then read on. The decision was made, according to the *Municipal Journal* "because houses represent such a big capital investment" and the council "felt it sensible to adopt a modern approach—similar to that of the private developer." Lovers of Sussex and of one of the loveliest towns in the south are advised to keep their distance from the result of this "modern approach," which has flats with "a pleasing ironwork balustrade," tiled fireplaces, "chain length" (sic) fencing and dwarf garden walls.

*

A thousand curses, if you will permit me to say so, on all those in the country



When the borough council of Bexleyheath bought the remains of the local Danson Park and gleefully organised boating on its Capability Brown lake, the adjoining temple, designed by Chambers, had already suffered the indignity of neglect and a swipe from a passing elm tree. But its threatened demolition was postponed by a local campaign and a word or two in "The Times." It has now been rescued by Sir David Bowes-Lyon who proposes to rebuild it by a lake at Walden Bury.

(councils, spec builders and thunderingly ineffectual architects and engineers) who continue to mess it up. With one or two exceptions too obvious to be cited yet again, there is barely a hamlet, town or village where new housing enhances the old—in spite of ministerial medals and the pleas of do-good societies. What the architectural profession needs is not a lower tier but an upper one.

EVERY INCH AN INCHBALD

Michael Inchbald, the interior decorator with a flair for turning old light fittings into coffee tables and ventilator grilles into bookcases, has done some ingenious treasure hunting at the Law Society's headquarters in Chancery Lane. Among his finds are portraits of forgotten legal figures which now line the white and orange ("call it amaryllis") walls of the Ladies' Annexe. Mr. Inchbald has done a very skilful job of converting a gloomy near-basement and an adjoining cellar into a reception room and a dining room with a feeling of spaciousness.

CULTURE IN CUSHENDUN

In the Clough Williams Ellis village of Cushendun, on the Antrim Coast of Northern Ireland, the out-of-season visitor was mildly surprised the other day to see an invasion by a formidable collection of Aran sweaters, beards, black suits with bow-ties, and tweed jackets with no ties. It was the occasion of a first-time-ever meeting of practising architects and artists from all parts of Ireland. A good deal of self-discipline was exercised because while the sun shone strongly on the chalk cliffs and sparkling sea outside the conference hotel, curtains were drawn in the upstairs room from ten in the morning until seven in the evening. No restraint, however, was noticeable thereafter in the consumption of salmon netted at the doorstep and of the wine of the country, which helped later to produce folk music from quite unexpected sources.

*

The venture was launched by the Royal Society of Ulster Architects and the forty-odd participants voted it such a success that it will be repeated regularly in different parts of Ireland.

ASTRAGAL

Architects and Technical Information

We repeat below details of the JOURNAL's programme of study on the problem of the contents of the practising architect's personal reference library, which was first published in the AJ of April 13.

AJ Fellowship of Up To £2,000

The AJ is offering up to £2,000, according to the experience of the candidate, to an architect who can devote a period of not more than one year to directing, co-ordinating and editing the programme of work briefly outlined above. Applicants should write to the Editor, THE ARCHITECTS' JOURNAL, 9-13, Queen Anne's Gate, Westminster, S.W.1, giving details of their experience. Applications must be submitted by May 15. Bearing in mind the potential value of the experience gained in carrying out this work, we earnestly hope that offices will allow architects to be seconded for a year.

What should be the contents of the practising architect's personal reference system?

It has now been officially recommended that the SfB system of classification should be adopted for filing technical information. What has not been recommended is what technical literature should be beside every architect's drawing board.

The JOURNAL, with the co-operation of a number of leading public and private architectural offices, is now attempting to solve the problem of what literature should be available.

In brief we are proposing to make SfB classification the formal framework into which technical information must be fitted. We are using the "Building Element" headings (1) to (9), as it is in the design of the elements of a building that architectural problems mainly arise. It is therefore appropriate to file the technical information which can help solve these problems under these element headings also.

We are asking our architect collaborators to do three things:—

(1) To prepare a design procedure for each of the 60 or so principal element headings: that is, a check list of all the aspects of design which must be borne in mind.

(2) To prepare a list of references related to this check list, telling the architect where to look for data needed in all stages of the design process.

(3) To prepare a short article which will amplify or simplify one or more aspects of the bibliography.

The result of this work will be published in a special series of weekly supplements to the JOURNAL. This will be planned to start in mid-1961 and the list of SfB building element headings will be completed in about a year. The series will give every architect the essential skeleton for his own personal library.

Our aim is simple, but the detailed implementation of it is extremely complex. It is because of this that we have already asked for help from a number of busy offices. This invitation we now extend to any architect who can help make this venture a success.

LETTERS

"Oxfordian"

Hugh Morris and Associates

Kenneth Cooper, M.T.P.I.
County Planning Officer to Wiltshire County Council

John Morris, B.A., Ph.D.

Walter Segal

Housing Old People

SIR: Is the Ministry of Housing in touch with real life? I am thinking of its recommendations concerning more "flatlets" for old people.

Growing old is altogether quite a problem, and old people are faced with many a difficulty already, without having their sense of not belonging aggravated by the accommodation given to them. Transition from their existing environment into a new one needs to be sympathetic, and glaring differences in living conditions should be avoided if possible.

The new surroundings at least need to have the same feel and amenity about them as the old. If there *are* going to be differences, then let them be of improved, not *reduced* standards.

Who, considering the subject sympathetically, thinks that communal toilet facilities, shared by several residents, are an improvement? Do the residents like the idea? Has the Ministry carried out any surveys amongst old people themselves?

Communal facilities may perhaps suit the vigour of youth, in hostel and camp, but hardly the old, who throughout the years have become accustomed to other arrangements. Just imagine the morning procession of chamber pots down the corridor, not to mention the jolly medley of emptying teapots!

The Ministry seems to be economising at the expense of desirability and convenience. "Flatlets" are, in essence, bed-sitters with kitchenette attached. Not only do the old people have to get rid of most of their belongings (a wrench, indeed, to part with those things one has collected and treasured over a lifetime), but they also must needs dine in the same place in which they live and sleep.

Again, have the needs of old people really been considered? The available research rather indicates that all this is what is NOT wanted. It is a pity that any research is needed at all in order to prove the point. Careful consideration of what one would oneself like and dislike when old should give sufficient data on the basic planning requirements involved.

The fact that the standard of toilet accommodation in "flatlets" is higher than that in most family dwellings, or that financial help may be given to tenants wishing to purchase new furniture, is of minor importance compared with the emotional well-being of the occupants. Does one finish up with a *home* in the happy, or the institutional, sense of the term?

"OXFORDIAN"

The Training for Technicians

SIR: The RIBA Annual General Meeting takes place at 6 p.m. on Tuesday, May 9. On page 9 of the annual report it is stated that "the *ad hoc* committee has, however, appointed a sub-committee to draw up at once a scheme of training for technicians so that no time shall be lost if the Council approves in principle the setting up of such a category."

We hesitate to criticise the Council for trying to get a move on, but we believe that the Council should take no decisions on this matter without consulting the members through a special general meeting after publishing their proposals in detail.

The economic, organisational and architectural implications are so great and so little understood that it would be disastrous if they were not discussed fully before any irrevocable action is taken.

We hope that others who share this view will attend the Annual General Meeting.

Signed:
HUGH MORRIS
ROBIN BUTTERELL
THURSTON WILLIAMS
HILARY CHAMBERS
JOHN SMITH
CHRIS MUSSON
ALAN DIPROSE

Training of Planners

SIR: The provision of adequate training facilities for junior staff, and particularly those entering the planning profession by way of the Indentured Pupil system, is a matter which has long exercised the minds of Planning Officers, and perhaps none more acutely than those whose areas are largely rural and remote from the larger centres of population with their greater facilities for study.

In areas such as Wiltshire, postal tuition has, of necessity, become the usual method of preparing for the examinations of the Town Planning Institute, but it is, I think, generally recognised that the subject of Design is one which cannot adequately be covered by this method and that more personal tuition and supervised studio work is desirable—if not indeed essential.

Those who, like myself, are faced with these difficulties may therefore be interested in a new venture in Wiltshire where, with the active support of the South-Western Branch of the Town Planning Institute, a one-week's residential course on Design is being held in September at the Wiltshire Residential College at Urchfont Manor, near Devizes.

The course will be an intensive one, combining lectures with a related programme of studio work. Inquiries for places have come from all parts of the South and South-West of the country and the interest has been so great that it has been decided to hold a further course in 1962.

It is believed that the course will serve a useful purpose in helping younger entrants to the planning profession and I shall be most pleased to send details to any of your readers who may be interested.

KENNETH COOPER

Trowbridge, Wilts.

Stevenage Architects

SIR: It is a pity that Astragal's kind words on the Stevenage Town Centre (March 30, 1961, which I unfortunately first read today) should be marred by an unkind insult to one of its chief authors.

The pedestrian centre was planned by Holliday and others soon after the war, but scrapped by the then Development Corporation in 1953, as allegedly uneconomic. It was rescued by the protests of the early residents, backed and encouraged by the architects who had worked on it and believed in it.

The Development Corporation has gracefully acknowledged the fact in various official documents; for example, "the people of Stevenage played a big part in insisting . . . that the shopping centre should be for pedestrians only" (Official Programme of the Queen's Visit, 1959); and the whole affair is well documented in the local press.

As a person responsible for convening the citizens' meeting, and as a member of the delegations that waited upon the Ministry and the Corporation, I feel bound to put on record that our public effort could not have prevailed without the courageous and unceasing endeavours of the then chief architect, Donald Reay, whose baby the threatened centre was.

Yet your columnist depreciates Reay as the "never-mind-who," whom Leonard Vincent replaced, when he left for the States, after seeing the Town Centre through its final approval.

This discourtesy has provoked irritated comment among those concerned with the birth pangs of the pedestrian centre, and must be embarrassing to all who know the facts, not least to Vincent, who, as Deputy, was then engaged on other matters, and played no part in our protest.

For there is surely no need to import personalities into the business; the town centre is the achievement of many men, an encouraging example of fruitful co-operation between architects and public.

JOHN MORRIS
formerly President, Stevenage Residents' Association

Stevenage

St. Anne's College

SIR: Your publication of the designs for St. Anne's College, Oxford, stirs memories of French in-between architects, Djo Bourgeois, Charles Siclis and Pol Abraham. Is here, one wonders, reading eulogies which appeared elsewhere, a new field for exploration by the architectural connoisseurs of the 1960s?

WALTER SEGAL

London, N.6

NEWS

RIBA

Revision of the Bye-Laws

The objections we anticipated in our leader two weeks ago were in fact raised at the special general meeting of the RIBA convened to consider the Council's proposed revisions to the bye-laws. Cleeve Barr, chairman of the Constitutional Committee responsible for the changes, was on the platform and expressed surprise that there should be objections from the floor, since the revisions had been well known for some time, particularly when the final report of this work was published last July in the RIBAJ. The major job of this committee was, of course, to reconstitute the RIBA Council on more democratic lines, whilst tidying up the rest of the bye-laws where they were out of date or revealed minor weaknesses. There is no doubt that the Barr committee have on the whole done a most excellent job, but the very purpose of the meeting was surely to allow members to comment and suggest further amendments to the proposed bye-laws in final draft form, the one proper occasion on which this could be done.

When J. M. Austin-Smith launched out at the fact that the AA were no longer to have a representative, and that the London area had been left out from the regional elections, it was pointed out by the Secretariat through Herbert Jackson in the chair that the meeting could only consider and vote on any motion which was in the form of a precisely worded amendment to the draft bye-laws. To have an AA representative on the Council did not affect just one but several of the proposed new bye-laws. J. M. Austin-Smith was thus faced with an impossible job in trying to frame a motion, and he had to withdraw.

At the same time, however, this point of order raised by the Secretariat was a bad tactical move, because later in the proceedings Guy Oddie was able to point out certain inconsistencies about the rules covering general and special general meetings which obviously had to be put right one way or another, and although the secretariat and the members present struggled valiantly for nearly an hour with the wording, gradually involving more and more clauses, in the end it had to be accepted that the secretariat would do their best after the meeting to put the matter right whilst expressing the intention of members present. In a word, Oddie scored a bye. He also protested strongly about the fact that London would be excluded from the regional elections, and would, therefore, only have one vote. Cleeve Barr said that it was inaccurate to say that the three to four thousand members living and working in London and Middlesex would have only one vote (and he chided the AJ for saying so on April 20); under the new bye-laws metropolitan members would have 33 votes every three years, in comparison with 34 for the rest of the country. This is, of course true, but takes no account of the fact that the national elections are on a plural vote, whilst the regional elections are on a straight constituency single vote. Thus metropolitan members will be excluded from the election of 28 regional members, nearly half the elected seats on the council.

Jeremy Mackay-Lewis requested that there should be some form of student representation on the Council, which was right and proper since there were 5,000 odd students paying annual subscriptions. Gordon Ricketts said that students could not be permitted under the Charter, but this Mackay-Lewis disputed.

Cleeve Barr pointed out, when it was asked why only Fellows were eligible for office as Honorary Secretary, that although this was one of the things the Constitutional Committee would have liked to scrap, it was one of several matters prescribed by the Charter, within which the revision had to be drafted.

Subject to various other minor amendments, including stepping up the notice for special general meetings from seven to 14 days, and the quorum at meetings from 20 to 50, the proposed revisions were then adopted. They now remain to be confirmed, as required by the Charter, at a further general meeting on May 2 before being placed before the Privy Council for approval.

JOINT EDUCATION

Conference at Cambridge

The need for joint education in the building industry was pinpointed in a resolution agreed unanimously by the 75 delegates attending a one-day conference on joint education held in Cambridge on April 21 under the auspices of the Eastern Counties Joint Consultative Board of Architects, Quantity Surveyors and Builders.

"This conference," the resolution said, "having considered the present system of training architects, quantity surveyors and builders, is convinced of the desirability of some measure of joint education as a means to a more efficient and effective building industry.

"Believing that some knowledge and appreciation of the techniques and problems of the other members of the building team will lead to an increase in all-round efficiency, the Conference urges the National Joint Consultative Committee to consider as a matter of urgency at what stage of training and to what extent joint education can be introduced, if necessary initially on an experimental basis."

Technical-technological training alone could not make an architect, either in the medium rank of "client satisfier" or one of "the starry few who break new spatial ground," said Dr. Denis Harper, Professor of Building, University of Manchester, presenting a paper on Architectural Education.

The deficiencies of architectural education as they affected joint education were a general limitation of technical background; a lack of contact with the industry as a whole; and a wish to create significant architecture without first a quest for sound building.

The so-called "package deal," whose growth showed that the public was ready to grasp at anything that promised a fixed price and a firm date, demonstrated the need for closer co-operation and therefore of joint education, said Ian M. Leslie, editor of *The Builder*.

Before starting on architectural problems, students of architecture should first of all be taught the use of materials, said J. E. L. Caldwell, president of the Hertfordshire Chapter of Essex, Cambs and Herts Society of Architects, opening the general discussion.

RFAC AT BRISTOL

Wine Street Campaign Continues

The Royal Fine Art Commission has asked the Bristol Town Clerk to arrange a meeting between representatives of the Corporation and the RFAC to discuss the plans of projected buildings by Norwich Union and the Bank of England in the Wine Street Central area, and the future of the area as a whole.

The refusal last month of the Minister of Housing to intervene to prevent these piecemeal developments of what many local people considered should be a comprehensive development area in the heart of the city, looked at first like the end of the long campaign waged by Bristol Civic Society, Bristol Architects Forum and others (reported in AJ, February 9 and March 9). Bristol City Council rejected a petition for reconsideration, organised by these bodies and signed by 11,500 people; then the Minister refused to intervene. Building was expected to begin early this month: it was too late, it seemed, for anyone in authority to call a halt.

At this point, however, the RFAC took up the matter, by requesting Norwich Union and the Bank of England to let them see their plans for the Wine Street projects, and as a result of doing so has written to the Town Clerk to ask for a meeting.

"Bristol is a city of great distinction, with many important buildings surviving from the past and an individual character which is seldom found in this country," the letter points out. "In the opinion of the Commission the redevelopment of this particular area provides an opportunity for a comprehensive scheme that by the quality of its layout and its fine architecture could make a worthy addition to the city.

"The Commission is not satisfied on the information presented to it, including the design of buildings for the Bank of England and the Norwich Union Insurance Society . . . that advantage is being taken of the opportunity."

Copies of the letter have been sent to MOHLG, the Bank of England, the Norwich Insurance Society, the RIBA, and the Bristol Civic Society.

DURHAM UNIVERSITY

Symposium on Urban Survival and Traffic

The Department of Civil Engineering at Durham University was responsible for organising this most timely and valuable symposium at Newcastle last month. The key to the four days' discussion is given in the following extract from a statement read out at the last session by Colin Buchanan, and signed by himself and the five other architects to took part (D. Rigby Childs, G. C. Logie, Gordon Michell, L. J. Morton and Professor J. H. Napper) which said:—

"In our view it is not only possible but absolutely essential to set out the qualities that urban areas should possess if they are to be suitable for civilised living. They will be qualities relating to scale, convenience, economy, safety and environmental character. To secure these qualities AND to make best use of motor transport is the crucial problem.

"Unless thought is concentrated on this issue there seems to be a great danger that measures conceived solely to improve the movement of vehicular traffic will in the end render towns less rather than more habitable, and the consequences of this for an essentially urban nation would be incalculable."

Although there were so few architects taking part, those that did made notable contributions to the problem. Colin Buchanan emphasised that "in an urban area, if you disregard through traffic, the vehicular movements are wholly related to the buildings"; and that "it is ludicrous to try to keep the planning of the roads and the planning of the buildings in separate compartments; you might as well hand over the rooms of a house to one designer and the passages and staircases to another.

"I think," Buchanan went on, "that there is a very close analogy here . . . I submit that there is no essential difference between planning the accommodation of a building with all the circulation problems involved, and planning the accommodation of an urban area with all the circulation problems of vehicles and pedestrians. In both cases there is a design problem of disposing occupiable space in relation to means of access. If designing a house or hospital be defined as a problem in architectural design, so, I submit, must designing an urban area be basically a problem in architectural design.

"I would not, however, wish for one moment to convey the impression that I regard the design of an urban area as exclusively a job for the architectural profession. It so happens, I admit, that I think architects, by virtue of the thorough grounding they get all through their training and subsequently in circulation planning, could probably make a much more forceful contribution to urban planning than perhaps they themselves realise, but I was not concerned with professional claims at all.

"All I want to demonstrate is the absolute oneness of traffic planning and building planning, and that in its essentials it is architectural design on a big scale—so big in fact that there is room and need for all the constructional professions to collaborate.

"I am encouraged in this view when I think of the work that has been done in this country since the war. Where we have, in the traditional manner, entrusted streets to one profession and buildings to another (as in much of the blitzed city reconstruction) the results have not been impressive. Where (as for example at Stevenage and still more so at Cumbernauld) we have adopted the comprehensive architectural approach then a real advance is apparent in the handling of motor traffic.

"The key subject for the future will be the art or science of arranging buildings for efficient circulation and good environment. I call this, for short, *Traffic Architecture*."

Mr. Gordon Michell, speaking on the last day of the symposium, discussed the question which he complained had been left undiscussed and certainly unanswered: "What kind of city do we want?" Our city streets were, he urged, "a disgrace to a supposedly civilised and cultured nation."

One of the most important things was to realise the essential difference between a road and a street. Roads should be designed to enable vehicular traffic to flow as smoothly as possible, uninterrupted by pedestrians. Streets should be designed for a pedestrian scale of 2 m.p.h."

We should not be afraid of planning for people to walk. "Provide reasonable, safe, quiet and changing conditions and people WILL walk. Strangely enough the Americans have proved this in the better of their Regional Shopping Centres where, although surrounded by 10,000 parked cars, conditions have been created of extreme pedestrian peace and a civilised environment unknown in the downtown areas of their cities. "We cannot permit similar centres here owing to acute shortage of space, but there is nothing to stop us planning to provide just such conditions in our own downtown areas."

Michell referred to schemes for urban renewal in the biggest US cities. "I say with great conviction," he added, "that the drift back to the town and city is on. It is on because it is in the cities that people find they have the requisites of life, the immediacy, the variety, the infinite choice, the stimulation of company, the interchange of ideas. The future life of the city depends on its having a first-rate communications structure."

A number of American experts submitted papers to the symposium in which the interaction between traffic facilities and land uses was discussed, among which Dr. J. D. Carroll, Director of the Chicago Area Transportation Study (the most elaborate traffic study ever), submitted "that the premise offered by many of our planners—that land uses are planned and then transportation facilities are adjusted to help to bring the land uses about—may be profitably turned over. Instead, consider how and why people move—how the emergent transport technology appears—and then devise ways to compatibly develop and use land so that adaptation is made to the new transportation technology in the fashion best calculated to be in the public interest.

"It is the job of the professional, I believe, to watch for and to accept innovation and change. This is particularly true of the planner, for it is from the pressures for adaptation brought on by technological change that he may find his greatest assistance in reshaping the urban shell towards a more humanly satisfactory environment. When planners look backward to the organisation and simplicity of the medieval town, or to the city of their fathers, they are violating their professional posture: eyes forward."

A similar line was taken by Professor Schlums, who referred to the proposal of P. Friedrich that land uses should be so arranged within a metropolitan region that roughly equal loading of traffic facilities is achieved.

Spreading the traffic load evenly in metropolitan areas was advocated by Gordon Logie, of the LCC architect's department. "As I see it," he said, "the only possible way of finally solving the problem is to spread the load away from the centre. One way that has been suggested is by a policy of *nucleation*, by which I mean encouraging existing and future suburban centres to grow into small satellites of the central area.

"These centres would have large parking areas directly connected with high-capacity roads; they would have new type shopping centres with a complete range of supermarkets, fairly large office populations, flats at fairly high densities, restaurants, cinemas and theatres and possibly some light industry."

Logie suggested that nucleation "might not only go a long way to solving our traffic problems if we designed for it a road network and added to our public transport facilities in a big way as well; it might also make Central London the pleasant, unhurried place it once was, and in addition give us numerous examples of a new kind of pedestrian central area."

Logie's proposed policy is probably on the right lines—except that he perhaps proposes to put too much into his proposed "centres." If all the land uses he proposed were combined within one area, this area would have to be rather larger than could practicably be embraced within one pedestrian precinct. Ian Nairn, in a talk on "The size of pedestrian precincts," suggested that pure pedestrian precincts ought not to be more than about 500 yards across, although he also spoke of what might be called "impure precincts," in which a small amount of motor traffic would be allowed to circulate, which could presumably be larger.

A smaller type of pedestrian shopping precinct, such as that now proposed for Stanmore, was described in outline by Lord Chorley at the conference of The Pedestrians' Association, on such precincts and called for by the Association in their "Pedestrian's Bill of Rights"—which also advocates the raising of footways 17 feet above the roadway in some very congested urban areas.

NIGEL SEYMER

PAYING FOR SPRAWL

Report from New South Wales

If Sydney is any guide to other cities in the world, continued urban sprawl is far more expensive than greater concentration at higher densities. This is the conclusion reached in a report—"Economics of Urban Expansion"—recently produced by the Cumberland County Council in New South Wales.

It is based on consideration of all the costs involved in three solutions to the possible expansion of Sydney.

Case A assumes the expansion of its area at the present rate for the next 20 years for a population increase of 700,000 and would require an additional 56,000 acres of land.

Case B assumes a similar expansion of the area together with a greater provision for future development after 20 years and requires an additional 97,000 acres of land.

Case C assumes no further outward expansion and proposes that the additional 700,000 people should be housed by intensified land use of the existing area, including redevelopment of inner suburbs at higher densities.

By careful computation of the "hidden costs" of additional utility services—roads, sewers, water, gas, electricity, telephones, etc., as well as additional costs for road transport, the total increased annual charges needed for both initial construction and for maintenance and operation have been arrived at.

By 1978 these increased annual charges in the three cases are estimated as:

Case A—£35,020,000.

Case B—£54,420,000.

Case C—£8,350,000.

The conclusion is drawn that "the greater the compactness in development the greater economic advantages to the community as a whole and to its individual members."

The report then makes due allowance for the increased building costs to be expected in Case C from higher density development, which includes terrace houses and multi-storey flats, up to 130 persons to the acre. This results in the annual charges for Case C increasing a further £8,030,000 by 1978, which makes the total annual charges:

Case A—£35,020,000.

Case B—£54,420,000.

Case C—£16,380,000.

Thus the extreme case of expansion—Case B—would cost three times the higher density proposals, while the case for further expansion—Case A—would double the total annual cost of accommodating an additional 700,000 people within the existing area of Sydney.

The low density "lobby" in Britain has always made great play of the relatively high cost of building multi-storey flats as opposed to two-storey cottage development. It is said that the cost of flats is about double that for two-storey houses.

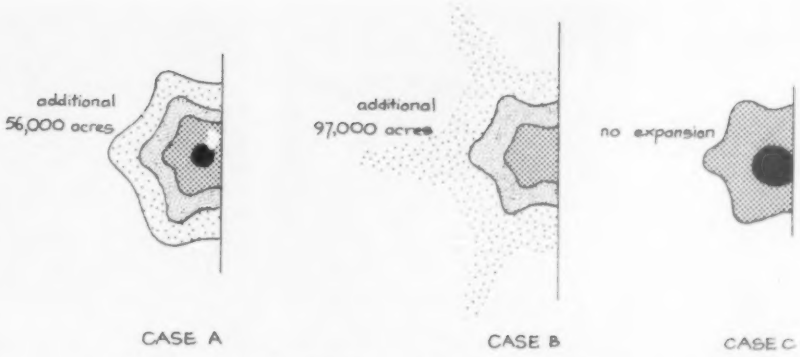
Several years ago, in a detailed study of high-density housing in Europe, R. A. Jensen (now Professor of Architecture at Adelaide University) showed how exaggerated was this claim. He produced detailed costs of continental examples to show how little difference there need be in practice between the building cost of flats and houses.

But this is only half of the story. If the "hidden costs" which have to be paid for by the community—public utilities, services, transport, etc.—are all included the economic case against urban sprawl may well be a great deal sounder than is generally realised.

These studies of Sydney have to be related to their context which includes much lower urban densities than are to be found in British cities. Therefore, it would be foolish to infer that a cost comparison would be anything like so overwhelmingly favourable to higher density as this study of Australia's largest city shows so convincingly.

Nevertheless, the studies do point to the urgent need for comparable studies in Britain.

A. G.



SYDNEY – 3 ALTERNATIVES

FBI

Report on Nigeria

More locally-based architects, civil and mechanical engineers and quantity surveyors would help to advance Nigeria's already well-established building and construction industry say the Federation of British Industries delegation who attended the Industrial Development Conference in Lagos last January, in a Report just published. They make no mention, however, of the evidently urgent need for planners.

Their report reproaches expatriate consultants, not resident in Nigeria, for tending to put forward proposals which are "too costly in relation to local circumstances in a developing country."

The delegation told the Nigerian authorities that it would pay them to aim for construction programmes of three to five years in the public sector, with long-term maintenance contracts for road and building repairs. They advocate concentration on standard specifications and an extension of the "mere three to four weeks tendering time which is currently called for, and which is very costly to comply with."

Cement, pre-cast cement products, builders' hardware, furniture and domestic joinery are among the building materials whose production, it is recommended, should be established or expanded in the country.

MOHLG

A National Water Plan?

The Central Advisory Water Committee is making a special study of Britain's water resources and needs for the Ministry of Housing and Local Government and is expected to report in the next few months.

Mr. Henry Brooke gave this news to a Birmingham Corporation dinner last week, to mark the completion of the new water supply project which supplies the city with water from the Elan Valley in North Wales.

"Never has the long view in water supply been more imperative than it is today," said Mr. Brooke, "with domestic and industrial demand rising dramatically and competition for the use of available water resources becoming ever more keen."

Nothing short of a plan for the river basin as a whole would serve, in the case of great rivers like the Severn, for example, where a working party is now organising a hydrological survey and planning "how best the water resources of the Severn can be developed so that the most good can accrue to everybody." Another report is being drafted on Wales's water supplies.

"We are passing from the era of control over applications to take water—control in the negative sense," said Mr. Brooke, "to the new era of positive measures to conserve water."

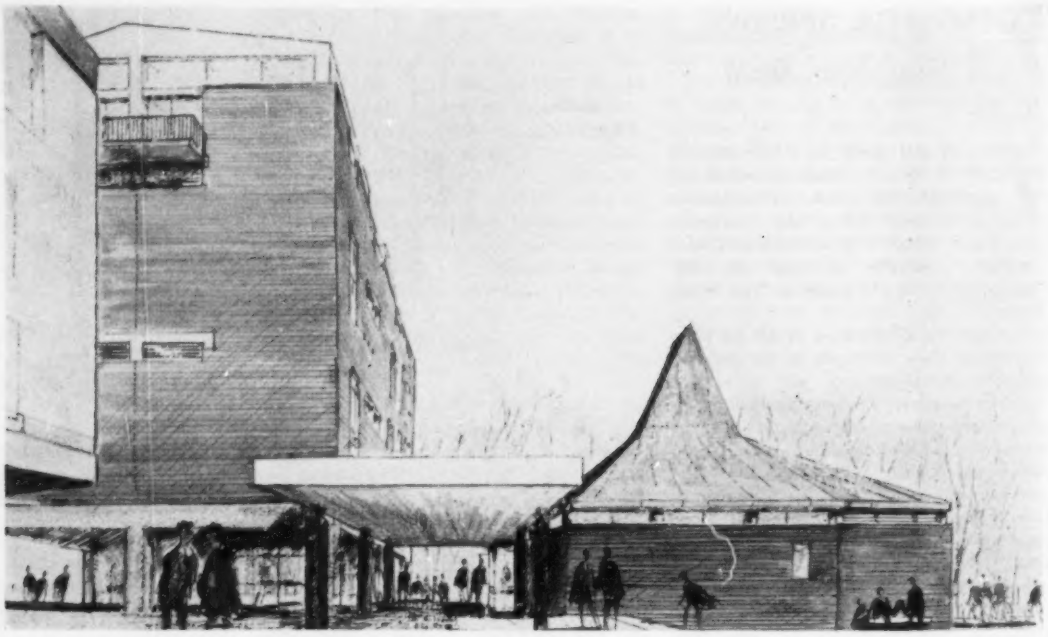
DIARY

Building at the Zoo: Sir Hugh Casson and Peter Shepheard, the Meeting Hall, Zoological Gardens, Regent's Park, 6.15. Tickets only, from the J.L.C. of the Joint Advisory Committee on Training in the Building Industry.

MAY 4

Pestalozzi Children's Village Trust: Exhibition of drawings and models at the Building Centre.

MAY 8 to MAY 13



University of Cambridge: lecture halls, Sidgwick Avenue; Sir Hugh Casson, Neville Conder & Partners

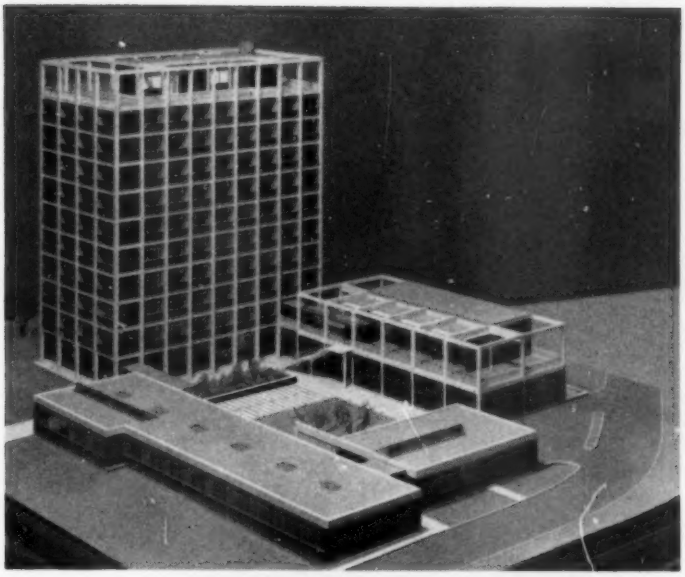
The Royal Academy

This year more sharply than ever because of the diversity of the entries, the architectural room at the Royal Academy reflects the inconsistencies on which this part of the exhibition is based. Even though it says in the conditions that preference will be given to "Geometrical Drawings not exceeding ½-in. scale," the overwhelming bulk of the work on show is in the form of perspectives, and this leads to the inevitable question as to whether it is really an *architectural* exhibition, or one concentrating on the skill of the perspective draughtsman. In the room there are, of course, a small minority of these perspectives which have actually been prepared by the architect or group of architects who have designed the particular building illustrated. In these cases there is always a chance that the perspective can become the means of expressing some strictly architectural idea. You can even imagine that such drawings might relate to the building with some of that clarity of intention, and the excitement of seeing an idea actually being worked out on paper as you get, say, from Picasso's Guernica sketches, or even the doodles in da Vinci's notebook. One can't remember any such architectural drawings at the Academy in recent years, but some may turn up one day. In the meantime, there remains some merit of a limited order in the perspective that the architect himself has prepared.

But the vast majority of these perspectives have been prepared by a handful of artists specialising in this work and however much one may admire their technique, the drawings no longer function as the means of communicating architectural ideas. All you seem to be left with is the chance to compare techniques of presentation. By and large, therefore, the architecture room becomes more than ever this year a little corner in the RA for the display of a specialised, superficial and inevitably rather dull form of applied art. A close parallel one can think of is the railway posters for coastal resorts, each featuring a bulbous and underclad female, but little of relevance about merits of the individual town being advertised.

There are always the models, of course, and, as usual, one or two of them have been most beautifully prepared. Certainly here you are getting a little closer to the truth, but the same argument of technique getting in the way applies to a lesser degree. If they really were by-products of design, models that architects had actually found essential to make as part of the process of design, even if the presentation were extremely crude, how much more informative and relevant these exhibits would be. But here again, the majority are produced by independent specialists at the job.

If the RA wants to stick to its traditional position about the architectural section, it should at least consider changing its terms of reference so as to encourage drawings and models that architects have prepared as an essential part of the design process however crude, and limit or exclude all these pieces of specialised, often slick presentation. Could not the RA, if it were not too shattering in its effect on the rest of the exhibition, also take note of the fact that the camera has now been invented, and permit the inclusion of photographs of recently completed buildings? We all know how the camera can exaggerate and distort but, despite this, it would be a big step towards reality.

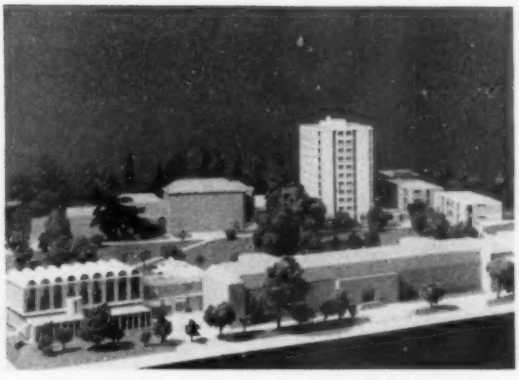


University of Swansea: Men's Hall of Residence No. 1; Sir Percy Thomas & Son; Partner in charge, Norman Thomas; associate partners, Dale Owen and I. L. James. (Model by Hunting Surveys Ltd.)

Royal College of Art, New Premises; Sir Hugh Casson, H. T. Cadbury-Brown and R. Y. Goodden (drawn by Sir Hugh Casson)





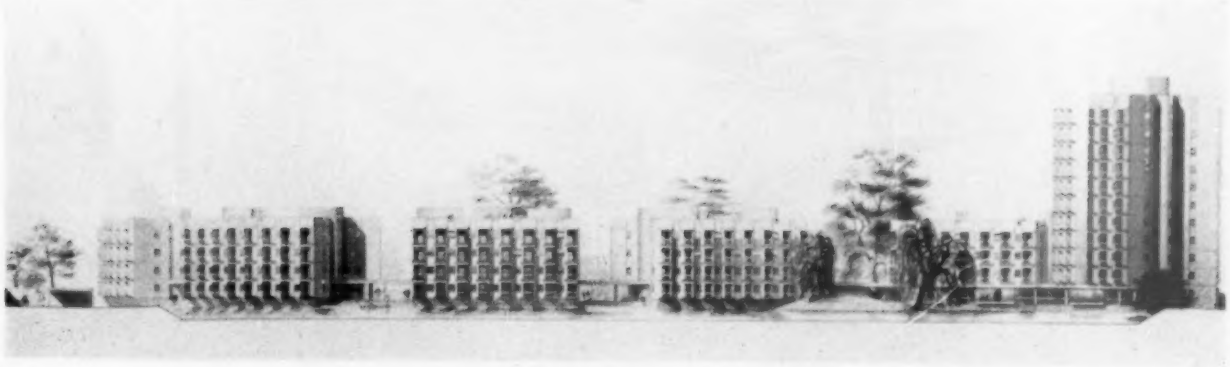


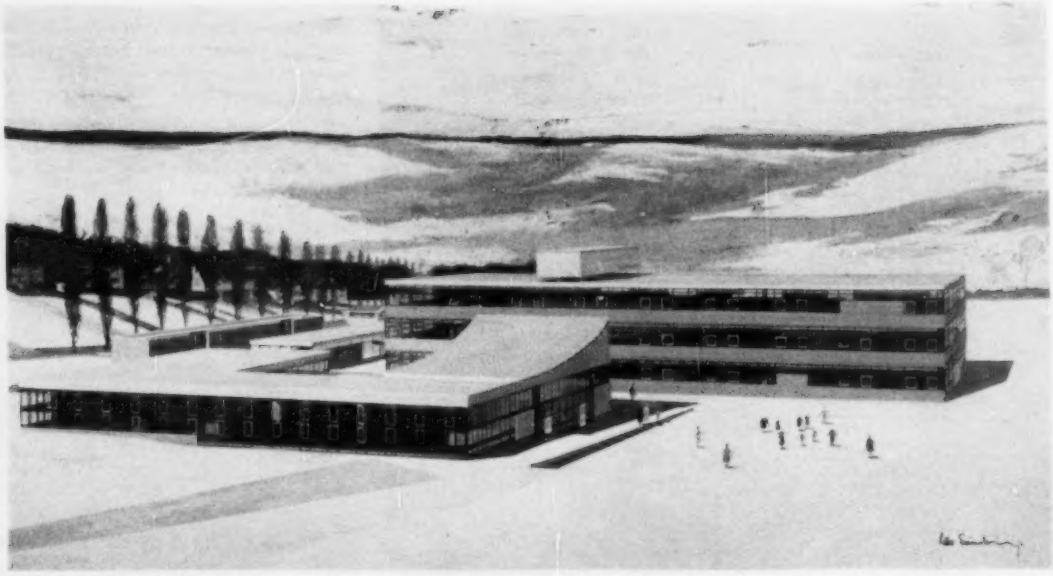
Halls of Residence, Fourah Bay College, University College of Sierra Leone; Frank M. Rutter (drawn by Edmund J. Thring)

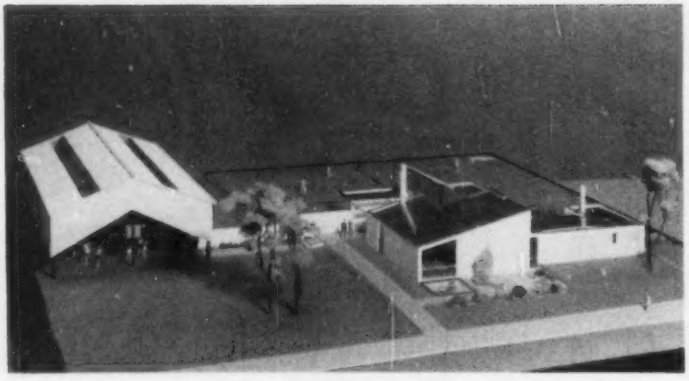
Universities and Colleges

Furzedown Teachers' Training College, Wandsworth; Leonard Manasseh & Partners. (Model by Charles Houthueson and Patrick Wakely)

St. Anne's College, Oxford; Howell, Killick & Partridge







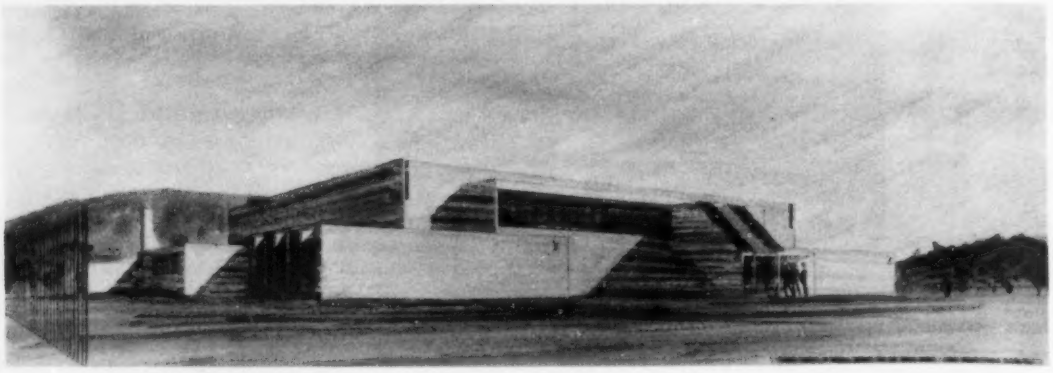
Longfield Secondary School; Elie Mayorcas in collaboration with E. T. Ashley Smith, Kent County Architect (drawn by Peter Sainsbury)

Schools, Youth Centre

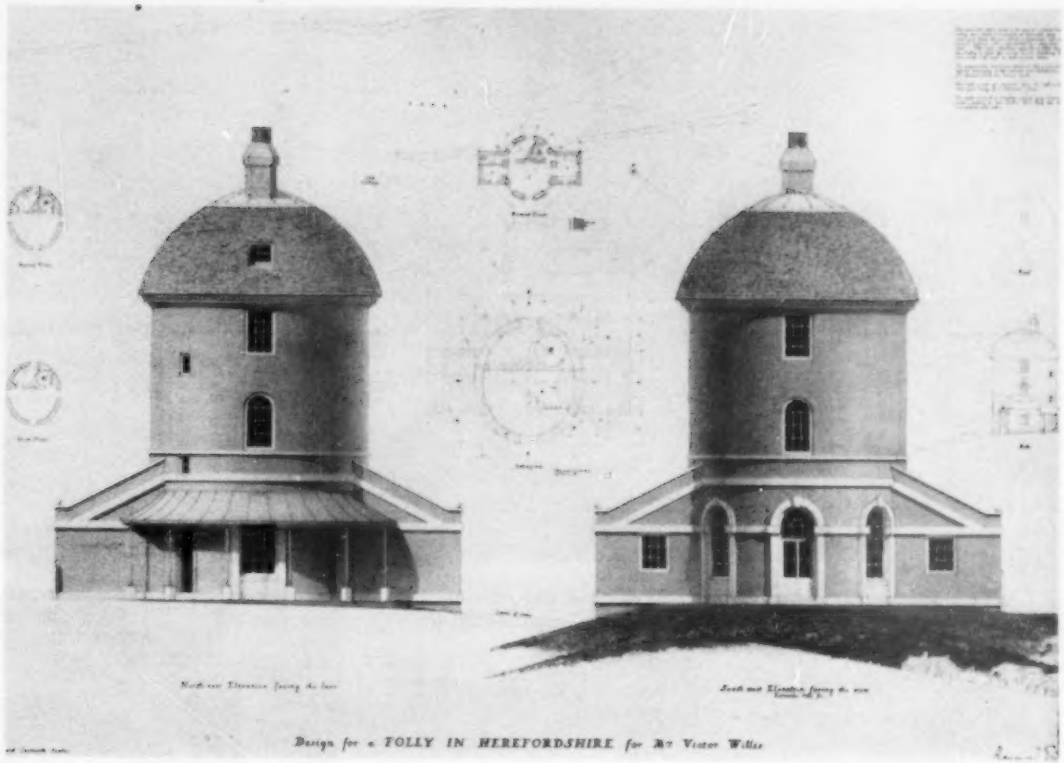
Ashmore Park Youth Centre for Staffordshire County Council; Norman & Dawbarn. (Model by T. Hackett)

Closed School at Redhill, Surrey, for the Home Office; John Wright, below

Pestalozzi Children's Village: the Meeting House; Sir Hugh Casson, Neville Conder & Partners, bottom











Folly in Herefordshire; Raymond Erith, top

Proposed shopping centre, Twickenham; Sir Albert E. Richardson, above

Housing

Development at Wellington Hill, Leeds; J. R. Sheridan-Shedden (drawn by Frank Weemys), left

Housing at Edgecombe Hall, Wandsworth; Clifford Culpin & Partners (drawn by William Suddaby)





M2 Typical Overbridge; Clifford Tee & Gale, consulting architects, Freeman, Fox & Partners, consulting engineers (drawn by Frank Weemys)

Severn Bridge; Sir Percy Thomas & Son, consulting architects (drawn by Frank Buckley), right

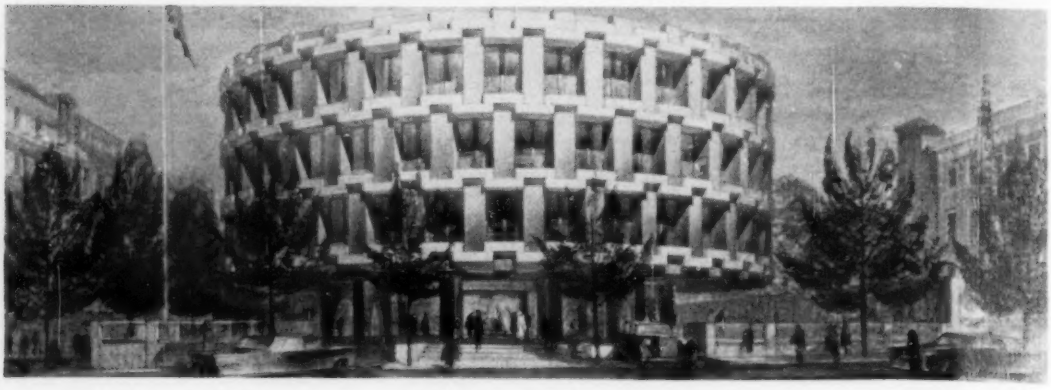


Government Projects



Crown Office and Post Office at Kirkby; Stanislaw Spielrein, MOW (drawn by William Suddaby), left

Embassy offices, Madrid; William S. Bryant, MOW (drawn by William Suddaby)





New Department Store, Sheffield; Yorke, Rosenberg & Mardall (drawn by Peter Sainsbury)

Commercial

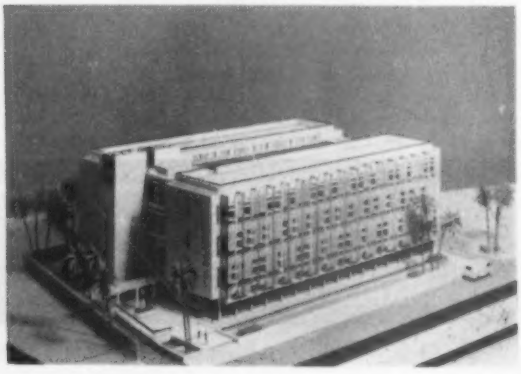
Proposed Hotel, Piccadilly Centre, Manchester; Covell and Matthews (drawn by A. E. H. Shearing), below

Gammon House, Bombay; new Headquarters of Gammon India (Private) Ltd.; Michael Lyell Associates (model by John Piper Ltd.), below right



Shops and offices, Rushey Green, Catford; H. Owen Luder (drawn by Peter Sainsbury), above





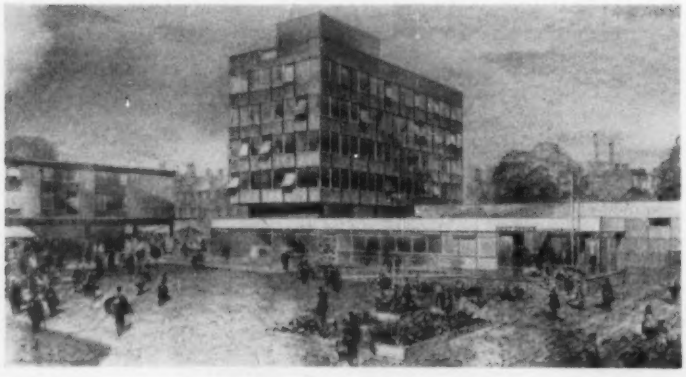


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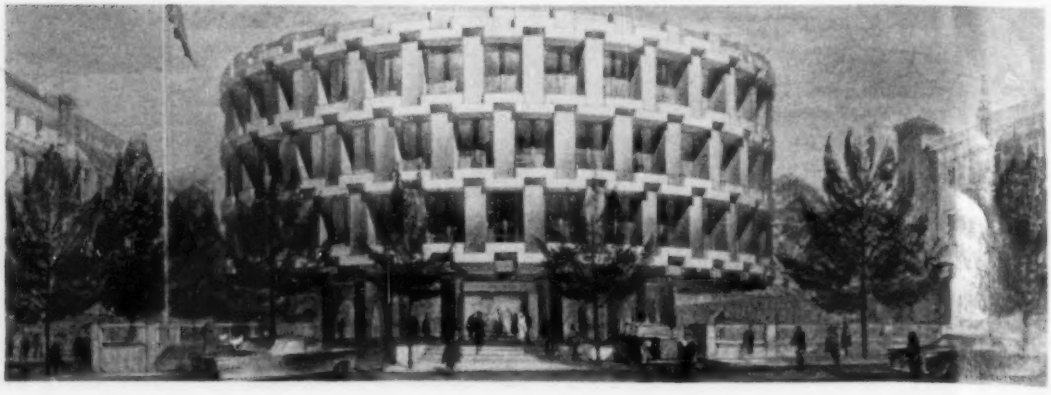


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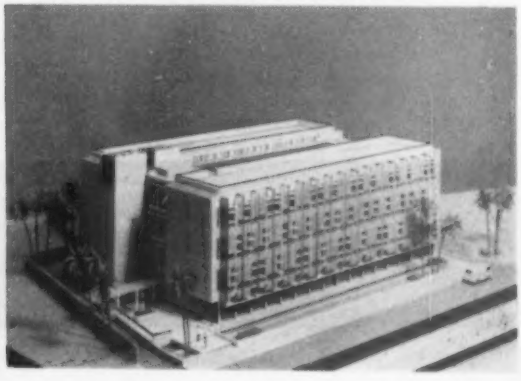
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Shops and offices, Rushey Green, Catford; H. Owen Luder (drawn by Peter Sainsbury), above





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SANITARY FITTINGS

Designed by WALLIS GOSLETT

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MARK II 18" × 12"
MARK I 22" × 16"

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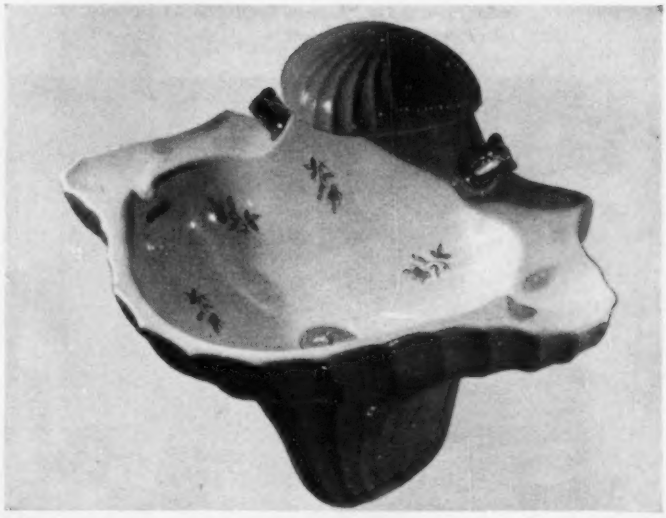
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technical section

THE INDUSTRY

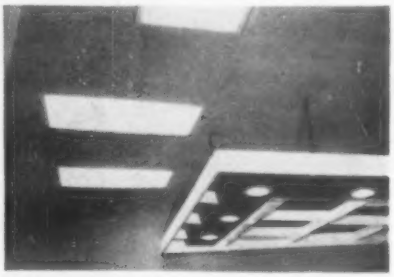
This week Brian Grant describes standardised furniture, ceiling heating, lecture theatre seats and portal frame buildings.

Standardised Furniture

The Vanson 21 range of furniture has been designed on a 21 in. module primarily because the makers believe it produces good proportions, and also because it allows existing building trade components to be incorporated. A further advantage is economy in raw materials, and this allows a few basic pieces to give good value for money, as repairs or alterations and additions can be made by adding standard components. So far bedroom and office furniture has been produced, but the range will in future extend throughout the house. The illustration shows a typical piece of office furniture, which is made with further units for filing, shelving and storage cupboards. Bedroom furniture can also incorporate mirrors and lavatory basins, and a number of different timbers are available. The whole range seems an intelligent piece of design which is reasonable in price and which architects can use to build into almost any required fitting. (*Vanson Furniture Ltd., Park Royal Road, London, N.W.*10.)

Electrical Heating

Triplan have evolved a system of electrical heating which can be applied to floors or ceilings. The heating elements are assembled on non-inflammable flexible formers, and ceilings are heated by laying the cables between joists over the plasterboard with mineral wool insulation directly above them. In existing buildings no structural work is involved and a complete installation can be carried out in about 48 hours at a cost of about 3s. to 3s. 6d. a square foot not including wiring up to the mains. Existing floors can be dealt with for about 50s. a square yard, including a thermoplastic tile finish. The manufacturers also produce Tri-lock acoustic ceilings, made from 12 gauge perforated sheet steel in panels 18 or 24 in. wide. Spans up to 12 ft. are possible without intermediate supports, costs, with electric heating, varying from 8s. to 10s. a square foot. When the heating is by hot water the cost is increased by a further 5s. a foot, or thereabouts. (*Triplan Thermal Acoustics Ltd., Cromford House, Cromford Court, Manchester* 4.)



Triplan ceiling heating



A Vanson office desk

Lecture Theatre Seating

The illustration on the right shows tip-up seating in one of two lecture theatres at the Lanchester College of Technology, Coventry. The seating has been designed to give maximum strength so as to withstand heavy usage and at the same time provide a good depth of upholstery with an amply large tip-up seat. The frames are welded rectangular section tube finished in stove enamel, the timber used being veneered iroko upholstered in p.v.c. covered 3 in. thick latex. The seating is being marketed under the trade name of Salisbury. (*Sintacel Ltd., 1 Salisbury Square, London, E.C.*4.)

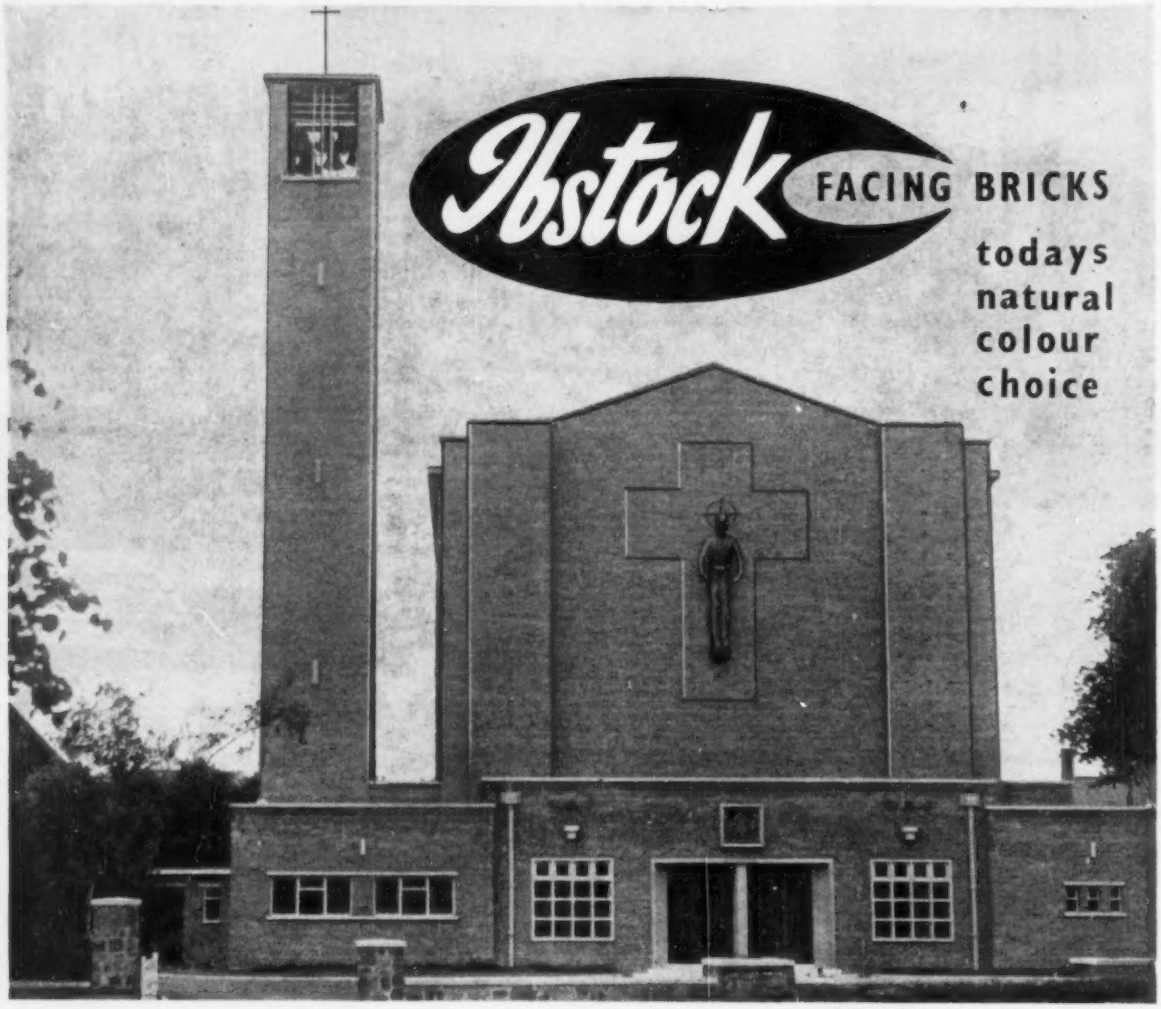
Salisbury lecture theatre seats



Buildings for Export

The new Arcon Portal buildings are intended mainly for overseas use where superimposed loading requirements do not exceed 6 lb./ sq. ft., though otherwise the steelwork is to BS 449. Designed wind loading is 72 m.p.h., or 100 m.p.h. if the buildings are to be used in hurricane areas. The advantage of the portal frame structure is that no tie members are needed across the building at eaves level, so that the clear internal height is uninterrupted except by the steelwork immediately beneath the roof slope. Standard spans vary from 33 ft. 4 in. to 66 ft. 8 in. by increments of 8 ft. 4 in., and there is also a choice of two eaves heights. Standard bay length is 16 ft. 8 in. Steelwork design allows spans to be erected side by side with only a single valley column, and the Z section purlins are secured to the top of the truss and braced diagonally down to the lower truss members to help take wind loads.

The buildings are supplied complete with asbestos cement or aluminium sheeting, and there is also an extensive range of doors and windows. Roof linings can be provided for fixing either over or under purlins. (*Taylor Woodrow (Building Exports) Ltd., 41 Welbeck Street, London, W.*1.)



Photograph by courtesy of Leicester Evening Mail

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technical section

SfB No.	(53)
UDC No.	696·11

7. PRACTICE

check lists, 1: water supply installations

When the AJ commenced publication of check lists for working drawings,* the aim was to provide a means of assisting the architect in the process of presenting the necessary information to those concerned with erecting the building. At the time it was pointed out that these check lists were designed to be used with working drawings in what might be described as their traditional form. The reason for this was not that the Editors believe that this form of working drawing is the best, but that until a better system has been devised and accepted on a wide scale the check lists would have their broadest application if related to this traditional form. Already there is evidence of considerable reform in this field. In this article Peter Burberry explains a system of check lists he has devised which has the advantage of being applicable no matter what form the working drawings take. In fact, the author puts forward a case against the idea of using a check list merely to *check* a drawing. The first of his lists appears this week.

* October 15, 1959.

Lists of items normally covered in working drawings have an obvious use in checking the completeness of the information given. Many lists, including those published in the AJ, summarise the information in terms of particular drawings. All aspects of construction, finishes and services appropriate to a particular plan, section or elevation are itemised. In this way the lists also serve beforehand to guide the draughtsman in what information should be shown on each drawing.

This approach has its limitations. It tends to be retrospective in that even if the lists are used as a guide during the preparation of drawings the architect consults them *after* he has done his thinking out of the problem. He finishes designing and then he sets about preparing his drawings. If he is reasonably methodical he takes out his check lists and refers to them as the drawings are "worked up." If he is not very methodical he may not look at the lists until the drawings are finished and he merely checks that he has not forgotten anything. Admittedly there is seldom a clear cut division between the detailed designing and the preparation of the working drawings. But the point is that check lists of this type are limited in their usefulness to the drawings they are designed to check. They do not help him in the actual designing. Yet this is the very time—the thinking out of the problem in detail—that he is most likely to overlook something important.

Most efforts at reforming working drawings are based on the idea that no drawing should contain unnecessary information (unnecessary, that is, to the people *using* the drawing) and that the breakdown of drawings should be based on the stages of construction. This approach has the advantage that it is the way architects think when designing their buildings and it finds expression in—for example—the elemental bill and, more latterly, the SfB system of classification. A broad division of the elements of a building is: *structure, carcass, finishes, services, fittings*).

A check list system should be related to the elements of a building rather than to drawings (i.e. the plan, section or elevation) and this is the principle adopted in the series of lists, the first of which appears this week. In preparing these lists I have confined myself to date to services, and the series comprises:

water supply installations
drainage installations
waste and soil plumbing installations
gas installations
electrical installations
telephone installations.

Water supply, drainage and waste and soil plumbing

technical section

ITEMS COMPRISED IN VARIOUS ASPECTS OF WATER SUPPLY INSTALLATIONS

ASPECT		ITEMS		CODES of PRACTICE
EXTERNALLY:		Company's main, Communication pipe, Company's stop valve, Meter and cut-off valve (by supply company)		general: model byelaws series 21
		Service pipe		CP 310
		Hydrants: fire, standpipe		CP 3 ch. VII pt. A
		External draw-off points		CP 99
INTERNALLY:	Cold Water Supply:	Service pipes:	Pipework, Stopvalve, Isolating valves, Emptying plugs, Portable draw-off points, Water softeners, Filters	
		Cisterns:	Cold water supply cistern, Boiler feed and expansion cistern, Ball valves, Warning pipes, Tray and overflow	
		Distributing pipes:	Pipework, Isolating valves, Emptying plugs, Non-portable draw-off points	
	Hot Water Supply:	Domestic boiler installation: Boiler:	Pressure relief valve	CP 342
			Emptying plug	CP 403, 101
			Feed and expansion vent. (if indirect system)	CP 3 ch. VII pt. B
		Primary Circulation:	(a) To cylinder (no l.v.'s)	
			(b) To radiators and towel rail (l.v.'s and circulating pump)	
			Vents if indirect as required by system	
		Hot water cylinder (direct, patent or indirect):	Cylinder	
			Vent	
			Hot water distribution pipes	
			Isolating valves	
			Emptying plugs	
			Hot water draw-off points	
			Immersion heater	
		Gas or electric thermal storage or instantaneous water heater and associated pipework		

Below and opposite are lists of items which may have to be included in various types of water supply installations

ITEMS COMPRISED IN VARIOUS ASPECTS OF WATER SUPPLY INSTALLATIONS

ASPECT		ITEMS	CODES of PRACTICE
BOOSTER PUMP INSTALLATION:	Float Operated:	Pumps and cut-off valves By-pass and non-return valve Float switches (in cistern or tank) Rising pipe to cistern Portable draw-off points	
	Pressure Cylinder:	Cylinder: Pressure switch Pressure relief valve Compressor or air filter Drain pipe Pumps and cut-off valves By pass and N.R.V. Rising pipe to cistern Portable draw-off points	
FIRE:	Hose Reel Installation:	Separate service pipe branch Main isolating valves Pipework serving hose reels: Isolating valves Emptying plugs Hose reels NOTE: if the mains pressure is inadequate use a booster pump installation as above. (pressure cylinder system or special switch in lieu of float switch)	CP 402. 101 (Fire offices committee scale of allowances)
	Sprinkler System:	Sources: Primary: Town main Elevated private reservoir pump from large source Secondary: Elevated cistern Pressure tank: Air and water pump Drain	CP 402. 201 (Fire offices committee rules for automatic sprinkler installation)
		Equipment: Back pressure valves (when secondary source is used in conjunction with town main) Main stop valve: Location plate Alarm valve, alarm and waste Air valve (when dry pipe system is used) Testing valves and wastes Distributing piping Sprinklers: Individual Multiple set	Consult specialist

technical section

CHECK LIST : WATER SUPPLY INSTALLATIONS

ITEMS (externally)	DRAWING		SCHEDULE	SPECIFICATION or BILLS of QUANTITY		RELATED BUILDER'S WORK	NOTE
	CONVENTION	ANNOTATIONS		DETAILS	British Standards		
TOWN MAIN	WM	dia material depth					
COMMUNICATION PIPE		dia material depth		P.C. for Co. to carry out work	quard pipe 1185	pit & cover	Iv required as cut off valve so that meter may be isolated
COMPANY'S STOPVALVE	CSV	dia.					
WATER METER	WM						
SERVICE PIPE (below ground)		dia depth		material: class, weight or gauge joints and fittings wrapping	Copper 1386 " fittings 864 Plastic 1972 Steel 1387 Lead 602,1085 Asb Cem 486 (2"min) Cast Iron 78 (1½"min) Spun Iron 1211 (3"min)	trench and backfill	
HYDRANTS: FIRE	FH	dia		manufacturers reference	750	pit and cover	
STAND POST	SPH	dia.		manufacturers reference		pit and cover	
PIPES: SERVICE (above ground)		dia of each section		material: quality weight, gauge, grade or class joints and fittings support wall sleeves & flanges falls insulation	LG Copper 659 " fittings 864 Plastic 1972 Steel 1387 Lead 602,603,1085 preformed insulation 1304	entry to building holes chases casings ducts	
DISTRIBUTING: cold							
hot							
CIRCULATING: flow	WHF						
return	WHR						
VENT	WHV						
WARNING							
FIRE: hose reel instal	FHsR						
sprinkler instal	FSp						
CISTERNS: COLD WATER SUPPLY	C.W.C.	capacity (actual) (also ball valves, warning pipe, distributing pipe)		material: quality weight, gauge, grade or class nominal & actual capacity overflow tray if used	Galv Steel 417 Pressed Steel sections 1564 CI sections 1563 Insulation 1304	support cover boxing insulation	if cisterns are coupled give details of coupling pipes and valves
BOILER FEED & EXP.	F & Exp.						
BALL VALVES		dia type		float length of arm fixing height type & manufacturers reference if not B.S.	Ball Valves 1212 Floats copper 1986 plastic 2456		B.R.S. type ball valve not covered by B.S.
VALVES: GLOBE (screwdown)		dia.		pattern material manufacturers reference	1010 1952 (sluice 2"min) 1218	for Iv's below ground pit & cover or quard pipe & cover B.S.1185	
GATE							
NON-RETURN							
PRESSURE RELIEF							
TAPS & DRAW-OFF POINTS			details & dias. given in sanitary appliance sched.		1010	boxing & insulation for external taps	fixing if required (e.g. back plate, elbow, swivel nose, biflow resistant)
EMPTYING PLUGS	EP	dia.		pattern manufacturers reference	Draining taps 2879		hose to ... or other point
MIXING VALVE (manual)		dia.		pattern material & finish fixing manufacturers reference	1415		

CHECK LIST : WATER SUPPLY INSTALLATIONS

ITEMS (externally)	DRAWING		SCHEDULE	SPECIFICATION or BILLS of QUANTITY		RELATED BUILDER'S WORK	NOTE
	CONVENTION	ANNOTATIONS		DETAILS	British Standards		
HOT WATER APPLIANCES:		capacity (actual) (also feed, distrib, vent, flow & return, pipes & immersion heater)		material: quality, gauge, grade or class capacity (nom. & act.) immersion heater boss man. ref. for pat. cyls.	Copper: direct 699 indirect 1566 Galv. steel: direct 417 indirect 1565 insulation 1304	support boxing insulation	
HOT WATER CYL.	H.W.C.						
DOMESTIC BOILER	Blr.	(also flow & return, pressure relief, flue)		type size manufacture	758	boiler room or recess fuel store flue & soot doors	oil storage tank if required
RADIATOR	rad. no.	unit number	make, type size, fixing			recess casing shelf	
TOWEL RAIL	T.R.		give details in rad. schedule if used, or use specification	make type size fixing			
WATER TREATMENT:							
FILTER	W.FILTER			make type capacity connection dias. fixing			
SOFTENER	W.SOFT.			make type capacity connection dias. fixing			complex types have salt containers & drain outlets
PUMPS:							
HAND	w.hand	dia. type		make type dia.	Semi-rotary 1208		
WATER SUPPLY BOOSTER	w.boost	dia.		make type dia. head flow electricity supply			
FIRE BOOSTER	f.w.boost					pump base fixing	
HEATING ACCELERATOR	w.h.acc.				Heat Acc. 1394		
SUMP	d.w.sump						
PRESSURE CYLINDER	pressure cyl.	capacity		P.C. for specialist		base & fixing	pressure gauge, water gauge, back press. valve, S.V.
FIRE EXTINGUISHING:							
HOSE REEL	H.s.R.	unit number	make type & nozzle dia. length of hose			recess & fixing	
SPRINKLERS	Sp.	unit number		make type size temperature	C.I. pipe for sprinkler installations 1641		

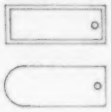
Above and opposite is a check list to be used during the design of water supply installations and the preparation of drawings, schedules, specifications and/or bills of quantities

installations on any but the bigger jobs are generally coped with by the architect, but whether he is designing the actual installation himself or uses the services of a consultant or specialist sub-contractor, the list will enable him to deal with the subject within the context of the building design as a whole. Each section of the list covers the essential features of a particular installation or operation. The lists do not specify in detail the information appropriate to any particular drawing as they are concerned with the *designing* as distinct from *presentation of information* process. This arrangement does not preclude the lists being used to check the content of any drawing, but it does mean that they can be used equally effectively with any working drawing system.

There is no reason why this approach to check lists cannot be applied to the remaining elements of the building (i.e. *structure, carcass, finishes, fittings*).

technical section

SANITARY FITTINGS – CHECK LIST

FITTING	SYMBOL	BRITISH STANDARDS	CONNECTIONS HOT	CONNECTIONS COLD	DIA. WASTE	NOTE	FIXING & SUPPORT
BATH		Cast iron 1189 Sheet steel 1390	¾" pillar tap	¾" pillar tap	1½" or 2"	shower shower curtain handspray handrail steamless inlet	Adj. feet
BIDET	 BDT		½"	½"	1¼"	mixing valve	screw to floor
LAVATORY BASIN	pedestal  PLB wall  LB corner  LB	Ceramic 1188 Metal 1329 Supports 1255	½" pillar tap	½" pillar tap	1¼"		pedestal cantilever brackets leg support lug for building in
W.C.'s.	high level  low level 	Pans 1213 Cistern 1125 Seat: plastic 1254 wood 2069 Ball valve 1212 Ball float 2456		½" B.V.		BRS ball valves not covered by British Standard	pan: screw to floor cistern: brackets plug to wall
SHOWER	tray  S rose  spray 		½" mixing valve	½"		mixing valve and spray may require 10'-0" head	
SINK	ceramic  S metal   	Fireclay 1206 Wash tubs 1229 D.B's. 1226 Metal 1244 Supports 1255	½" or ¾" bib tap ½" pillar tap or biflow swivel mixer	½" or ¾" bib tap ½" pillar tap	1¼"	cold supply direct from main drainer for ceramic	bracket brackets
WASH FOUNTAIN			¾" mixing valve	¾"	1½"	mixing valve and umbrella spray may require 10'-0" head	
SLOP HOPPER	 SH	Cistern 1125 Ball valve 1212 Float 2456		½" B.V.			screw to floor W.W.P. bracket or plug to wall
URINAL	wall  stall  slab 	Auto flush 1876		½" to drip cock		auto flush: 1 gall. per stall	auto flush brackets
DRINKING FOUNTAIN	wall  DF			½"		direct from main	plug to wall

A sample form of schedule for sanitary appliances suggested by the author

SANITARY APPLIANCE SCHEDULE

ROOM	APPLIANCE PART	MATERIAL	DESCRIPTION	SIZE	B.S. OR MAN.REF.	SUPPORT & FIXING	WATER SUPPLY	WASTE OR FLUSH	TRAP	WARNING OVERFLOW VENT OR SPARGE	SEAT OR COVER	PANEL OR CASING	ACCESORIES	NOTES AND REVISIONS

JOB NAME

SANITARY APPLIANCE SCHEDULE SHEET NO.

LOCATION

DRAWING NO.

ARCHITECT

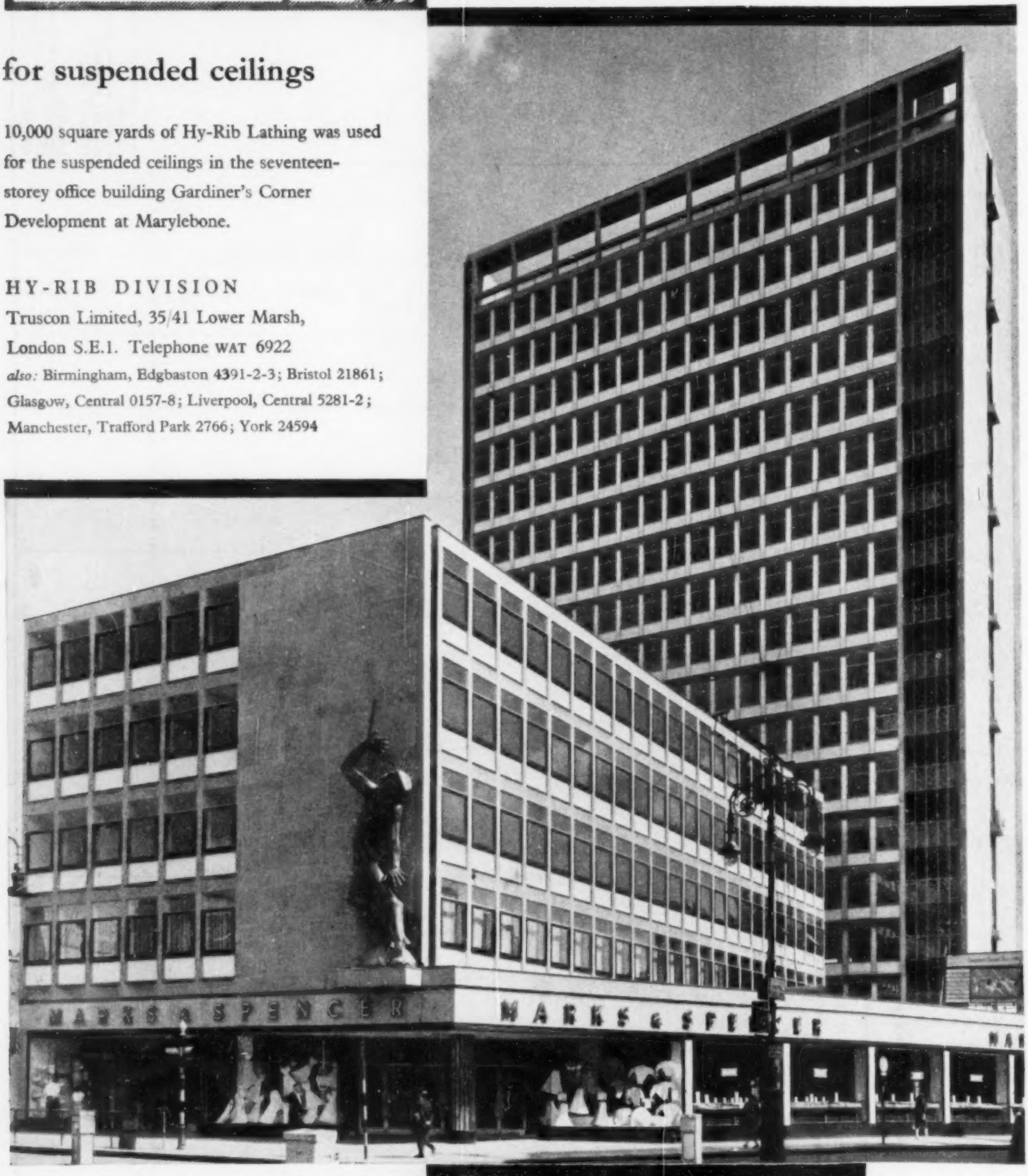
The Architects' Journal for May 4, 1961 [653

HY-RIB

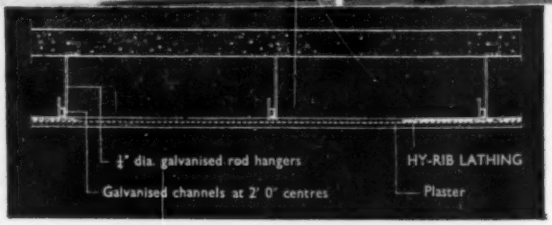
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The BASA Editor
The Building Centre
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Monthly supplement

BASA



EDITORIAL

It is extraordinary that the RIBA should consider educating a " second tier " before the problem of educating the architect has been solved. Even assuming that some form of " second tier " is necessary, surely it should be part of an overall framework for architectural education. Yet the RIBA has appointed a committee who are now dreaming up a syllabus for a " second tier " before the RIBA office survey team has shown that such a grade of assistant is even necessary.

Everyone seems to have their own pet concept of what the " two tier " idea means, ranging from the hack draughtsmen making the " master's " 6b sketches work (a hangover of 19th-century attitudes to design), to some form of technologist. This fact alone indicated that we must be very certain of our ground before making any decisions on educating a " second tier."

The only way of effectively raising our standard of architecture is through educational reform, reform that is founded on the realities facing the profession in the 20th century. It is a vital priority to which the RIBA should be devoting a great deal of time and research. At present the pace is too slow, the men concerned with education at the RIBA are far too busy and cannot solve the problems quickly. It is essential, therefore, that younger men should be elected to the RIBA Council, men who are not over-committed, and who can devote the time essential to the achievement of immediate basic solution to these educational problems and the many others facing the profession.

HC

RIBA COUNCIL ELECTIONS

Jeremy Mackay-Lewis

One of the most interesting names on the list of candidates for the RIBA Council election is that of *Jeremy Mackay-Lewis*, co-founder and ex-president of BASA.

It is important that he should be elected to the Council to represent the views of the younger members of the profession. In the present Council virtually all members are principals and partners in private practice; there is little representation for the salaried architect—who, in fact, constitutes the bulk of the profession.

Jeremy Mackay-Lewis received his formal training at the Liverpool University School of Architecture (1953-8), where he was president of the Architectural Society in 1955. During his final year he joined Hilary Chambers in founding BASA, becoming president in 1958 and being re-elected the following year.

His activities have remained wide and he now serves on both the Social and the Junior Liaison Committees of the RIBA; the latter, bringing together representatives of architects, surveyors and builders, could be of vast importance in achieving a more integrated building industry.

As a salaried architect with Robert Matthew and Johnson-Marshall he has been job-architect for a 1,000-place secondary school in Edinburgh and is now in charge of two further schools and an old people's home, all carried out as CLASP construction.

In 1959 he spent a highly instructive and exotic six months in the Caribbean. Invited to design a house for Lady Noble in Jamaica, he flew over to look at the site and subsequently produced sketch designs for a house for Elizabeth Taylor, as well as designing a week-end house for Prince Obolenski in Mexico. Interviewed by BASA, Mackay-Lewis revealed that his main preoccupations would be architectural education, and the " two-tiered " profession.

On education he says: " This is one of the most vital of immediate problems facing the RIBA. The present system of architectural education is dangerously misdirected and is the root cause of inadequate thinking and expression in our architecture today. Students are guided into a number of misconceptions on architecture from which a large number never escape. *The simple statement that, ' To build, the architect must have a client,' is neither taught nor understood. In how many student schemes is there a real client whom the student must satisfy ?*

" The impetus for architecture must spring from an understanding of human needs, and modern technology is the only means of achieving satisfactory answers to these needs. Yet the student is allowed, and even encouraged, to build ' castles in the air,' a habit which he finds tiresomely difficult to break when he enters office practice.

"*An architect's mind must be trained to be imaginative, yet at the same time logical; this combination is essential to his success as a designer.*

" The architect today has got to use his brain as never before in history, and without being taught the basic process of analysis and synthesis he cannot hope to grapple with the problems which confront him. His influence is great, and his responsibility for the environment which he creates, enormous. He must be trained for this heavy responsibility in the best possible way. A course of education should be balanced in relation to the tasks which he is to meet in the outside world, and the development of his personality should be such that he gives confidence to all those with whom he has to deal.

" We can pin-point three common defects in the average architect, all of which stem directly from educational shortcomings.

"*Firstly, he is reluctant to master and apply scientific theory to solve 20th-century problems.* So often when faced with a problem outside his past experience, he resorts to the purest empiricism.

" *Secondly, he approaches his problems with an insufficiently critical and enquiring mind.* The architect, the great creator, the organiser, the technologist, the balanced man, is in fact just as incapable of thinking clearly and analysing and synthesising problems logically as any other university graduate today.

" *Thirdly, most architects cannot write intelligible English.*

" These three common defects add up to a single basic deficiency—*THE LACK OF AN ACADEMIC APPROACH.*

" To put it bluntly, architectural students have to spend so much of their time on the drawing board that serious intellectual effort seems out of place. The student is more concerned with the development of *manipulative* rather than *conceptual* skill.

" This in turn is the result of confusion in the university between *educative* and *training* functions."

Turning to the much vexed problem of the proposed " two tier " profession:

" I am concerned that the salaried architect, who in fact makes up 75 per cent of the profession, is not adequately represented on Council. The issue of the 'two-tier' profession cannot be ignored by the salaried architect, since from his own point of view any decision in this direction is likely to have considerable personal and economic effects.

" *The solution of this problem is a fundamental issue and a decision should not be taken quickly by Council. There is far too much confusion clouding the issue; it would be fatal to create a special status for the draughtsmen simply because they exist in the present system.*

" Such men may well be essential to some practices in the country, but before creating a permanent position for the 'second tier' we should decide whether the modern architectural office *really* needs them or whether they are in fact a hang-over from the past. In this respect it is pointless to proceed until the report of the RIBA Office Survey Team is received.

" This fundamental issue is the foundation stone of architectural education. My connection with BASA has made me vitally interested in education; I am therefore all the more keen to sit on the RIBA Council, since it is the Council which ultimately controls education. In such a position I could help solve educational problems, and also put forward the views of the younger Members on architectural reform."

On the strength of these opinions alone we urge all young architects to support Jeremy Mackay-Lewis in the coming election; as students still in first-hand contact with the present inadequate educational system, we wish him every success.

DEVELOPMENT GROUP WORK

The recent meeting held at the RIBA to discuss the " Purpose of Organisation of Development Groups " proved a disappointment to the uninitiated, particularly those who wished to discover the purpose, although they may have left with a somewhat better idea of the organisational problems involved. Perhaps the most significant contribution to modern architecture in this country has been achieved through the work of development groups; yet schools of architecture and the profession as a whole have been slow to learn from this experience.

At the heart of development work lies the precise establishment of user requirements, followed by the solving of the technical problems involved in meeting these requirements within the limits of the funds available. In establishing these precise requirements by working with the user an architectural solution is made possible which will not be an imposition.

Much of the failure of modern architecture has occurred because architects do not find the inspiration for their architectural solutions in the user's needs. This in turn stems from educational defects, since design projects in schools of architecture are set almost entirely without providing an adequate client, in spite of the fact that an architectural problem cannot exist without one.

If the encouraging trend towards the setting up of research departments in schools of architecture continues, the number of such groups, and hence the demand for suitable staff, will be greatly increased. In addition, the problem of publication and dissemination of findings will become increasingly more complex and urgent.

Research without publication is no research at all, and publication which does not reach the general body of architects is of equally little value. Here, surely, is a vital task for the RIBA, the cataloguing of research papers and the regular notification to architects throughout the country of all relevant sources of information—perhaps in an appendix to the RIBA Journal.

It is equally important that the right men be drawn into research, not only by providing good salaries and opportunities, but also by intensive publicity in the schools of architecture. Students and lecturers must be kept in touch with current programmes of development work; regular visits by members of existing groups would bring home the realities of user requirement research to students and ensure a regular flow of suitable talent for an increasing research programme.

LETTER

Villa Savoie

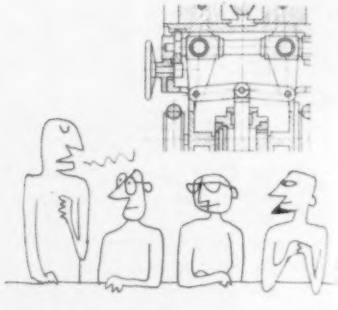
SIR: I have just returned from a visit to Paris during which I naturally made a pilgrimage to Villa Savoie.

I had heard about its present tragic state, standing in abandoned, isolated dignity in the midst of a cabbage patch. But I discovered that this was not all. It is suffering an army of occupation—an army of teenagers who use the house as their club.

Garage doors bear crude chalk drawings. The interior has a garish colour scheme and walls are covered with posters. A " coke " machine clogs the " space " beneath a staircase, and a juke box and jiving teenagers destroy another " space."

My illusions and faith in human aesthetic nature being shattered, and indeed my faith in Corb himself, I write to you to ask what can be done to save and resurrect this and other buildings which should be preserved as international monuments.

SUSAN DORNAN
Liverpool School of Architecture



"IT'S THE SAME THE WHOLE WORLD OVER"

In the February issue of *Action Etudiante*, a Swiss student newspaper, the students of the Geneva University School of Architecture published a report and survey of its organisation and relevant student feelings and opinions.

The survey was organised by the student executive and received almost total participation within the school.

General Organisation

A backcloth to the report was created by describing the school syllabus. The course is divided into two consecutive parts, theory and practice.

The initial theoretical stage is divided into three "ateliers" through which the student passes according to his ability and interests, there being no impeding time limit.

Architectural exercises are carried out under the direction of a studio master, along with courses in seven subjects dealing with technical, scientific and aesthetic problems related to the subject.

The Swiss student will pass from each "atelier" on collective judgment of his design work and on obtaining the necessary examination results.

On completing his theoretical course the student embarks on the practical stage in an architect's office, still retaining ties with his parent school.

To obtain his diploma, the Swiss student must handle a brief, design, administer and construct a building.

Advantages and Contrasts

Having explained their syllabus, the Geneva students agree that it has many advantages, allowing the student great liberty, and enabling him to work and pay for his studies at the same time.

The Swiss system indeed contrasts with its British counterpart. It needs further study to decide if it is an ultimate solution to education, but compared with the inflexible, archaic, system prevalent in Britain, it is a notable advance.

The Swiss course allows for the student's individual capabilities to be developed and involves him in the practical process of building, as against allowing him to leave his school brandishing against the building trades a mere paper diploma in theoretical applied architecture.

However, all is not well in Geneva; apparently undercurrents of unrest have prevailed for some time.

The survey is divided into four parts—the syllabus; school facilities; external problems; and general points. The answers are on a "Yes, No, Don't Know" basis.

Syllabus and Method

There are ten questions dealing with curriculum, criticism, staff-student relations, travel, integration and, tentatively, with the content of architecture and the architect's responsibilities.

The results show a strong affinity to student feelings in this country. The Geneva students feel that their design schemes bear little relationship to technical, social, economic or administrative problems common in everyday practice. Criticism of schemes is superficial and sparse, resulting in an autocratic approach to design by the student. Generally students wish for greater integration with allied professions and demand greater staff-student co-operation.

The vast majority of the students require their design projects to be related to the real needs of society, in the form of buildings which benefit that society as a whole, rather than individual dynamic or sculptural pieces of "art." They also realise that the architect can no longer be an individual genius, but must be a member of a group working towards a common end. Unfortunately the Swiss have studied these aspects no further.

It is essential that they analyse architecture before formulating the architect's responsibilities. Only then can they determine a method of education and its requirements.

Facilities

Only four questions cover this section. The students feel that insufficient technical data and materials are available, but opinion is divided on other library facilities. It is important to analyse the facilities further and to compare them with other schools of architecture. Only then can shortcomings be decided on a valid basis.

The last parts of the survey deal only indirectly with methods of education. Generally the questions were too vague to answer precisely, *e.g.*, "What are the big problems in architecture today?" Well, Well! However it was interesting to note that only a small percentage of students on leaving the school wished to work as individuals.

Conclusions

The Geneva students have proved that dissatisfaction exists. The following points are immediately discernible.

(i) Reform of the curriculum is required, projects must be related to social needs.

(ii) Lectures must be introduced dealing with the human being and his requirements, sociologically and psychologically.

(iii) Opinion tends towards the introduction of a tutorial system.

(iv) Greater participation by the student is required in compiling programmes for design problems.

(v) Integration with allied bodies is essential.

(vi) There is a need for comprehensive libraries with adequate reference systems for ever-changing technical subjects.

It is illuminating to find common desires prevalent in two countries as far apart as Britain and Switzerland. Geneva is now at a stage which BASA reached two years ago, after conducting a similar survey on a rather wider scale. In Britain it was soon realised that a greater analysis of some aspects was required. The content of architecture and its functions, particularly as related to architectural education, are being discussed over a series of conferences resulting in policy decisions. Tangible subjects, such as facilities, are being analysed by means of a rigorous questionnaire supplemented by personal observations.

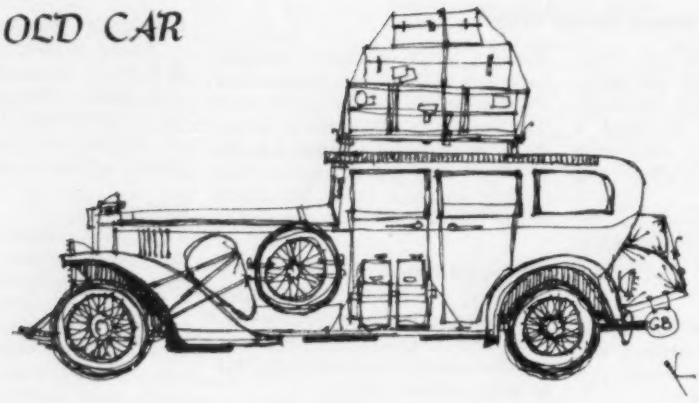
The Geneva students have now to carry out these difficult tasks, and BASA would wish to assist them with any comparative data they may require. Initially they must compare their own feelings with those of students in other schools; only then can progress begin. We have much in common, most of all in our wish to reform our educational systems towards a more relevant and realistic expression of our future profession. We wish Geneva students every success in their efforts.

KENNETH CLAXTON





OLD CAR



At this time of year many people are planning to spend their summer holidays in distant parts. A very economical way of travelling a long way is to go by old car. I will try to point out to you the advantages of this practical and amusing, frequently hair-raising, way of seeing the world, and how to choose a suitable vehicle and crew. My experience is largely based on a 6,000-mile five-and-a-half-week trip to Yugoslavia, Greece and Turkey undertaken in a car just twenty-six years old, with six passengers and half a ton of luggage.

First choose your car. 1928-1933 are the best years as most of the pressed steel bodies of the thirties have rusted away by now. Find somebody in your college who "knows" about cars and take him along to help you in your choice. We saw a 1933 Sunbeam saloon advertised in the local paper and our chap shook it, kicked it, listened to it and so on, and came back a few days later with twelve pounds ten, and it was ours. Buy the biggest car you can find. Don't worry about petrol consumption; even if it does only twelve miles per gallon that's only three pounds each per 1,000 miles. Now you must persuade your mechanic friend to come with you in the summer and, a week or two later, at a moment when he is off his guard, ask him to prepare the car for the journey. Make him check the engine, brakes, steering, cooling system and electrics. If it's a real vintage car he will delight in taking it completely to pieces and putting it back together again. Make sure you have six or seven really good tyres and don't worry too much about the cost as it won't be too much between six people. Our trip cost us £55 each, including buying and overhauling the Sunbeam.

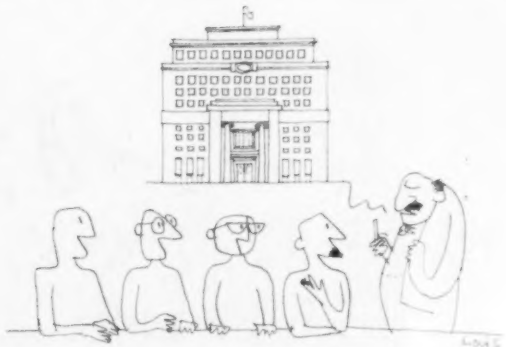
Now is the time to choose your crew, and to get some money out of them to make sure they don't drop out at the last minute. Take a theologist and a psychologist: then if you are ever bored driving through the desert, or stuck in gaol, start talking about birth-control or something, sit back and listen to a good argument. Whatever you do don't take the sort of chap who will start photographing the peasants in front of warships or frontier posts, otherwise you may not be able to resume your studies for several years.

It is hopeless to try to take every sort of spare for the car. Electrical failures are the most common and a spare dynamo is essential. Ours packed up in Athens but fortunately we had a wonderful battery which only needed charging every ten days. Batteries are not usually like this. We fitted our car up with lights for the tents at night and had the horn wired up as a burglar alarm which went off at the most embarrassing moments. Take at least five gallons of oil and two five-gallon jerry cans for petrol. The latter will save you a lot of money as petrol prices vary by as much as four shillings per gallon from one country to another. It is of course illegal to take cans of petrol over most frontiers but I *did* hear of one party, driving a Sunbeam, who went on exactly the same journey as us, crossing France on British petrol, Italy on Swiss, Germany on Austrian

Luggage will need much careful thought. Although we worked it out in detail, people turned up with a lot of extra odds and ends; luxuries like razors, soap and even hairbrushes. The Sunbeam sank to the ground when we piled into it. The hand brake came on every time we went round a bend and we had to release it completely before we had gone five miles, the brakes smoking ominously. We went over twenty-six mountain passes, 5,995 miles, with no handbrake. A good idea, if this happens to you, is to have a 9 in. by 3 in. air-brick handy. Tie a piece of string through the holes, put it under a front wheel and swing it in as you drive away, taking care not to hit passers-by in the process. A luggage rack on the roof is essential. Make it out of 6 in. by 1 in. floorboards so that it is rigid in itself and will spread the load evenly over the whole roof. We put three trunks on ours and the top one had to be very subtly adjusted or we went along with a ten degree list. We established a rota for watching it, a rota for driving, and a rota for shouting "Good morning" to the natives in the appropriate language.

The most frightful things will happen to your car on the journey. Remember to keep the wheel-nuts tightened, particularly on rough roads. We found we could take our wheels off without spanners at one stage. Don't worry too much about getting repairs done in villages off the beaten track. The more remote the place, the more imaginative the garage-man. He will convert any old bit of metal into a spare it would take years to get in this country. I once heard of an Arab jeweller, in a bazaar, making a ball-race for a Land-Rover back-axle! The Sunbeam is now full of pieces of Yugoslavian boring and Peleponnesian Volkswagen. Our worst moment was when we were climbing a mountain near Titograd. A valve fell into the cylinder, was folded in three, and then knocked back through the cylinder head. Water, steam and oil poured out everywhere and we thought our tour had come to an abrupt end. We had visions of abandoning our





beloved Sunbeam and hitch-hiking with our trunks. However the car was towed with about two feet of rope up and down the mountains to the nearest garage. The fellow there was not particularly helpful in suggesting that we cut off half the engine and carry on with the other half, but the local bus depot made a splendid repair, welding up the hole in our cylinder head. I hope this sort of thing will not be necessary on your trip but, whatever happens, you will get at least thirty punctures. Keep the tyre pressures high on the very rough roads or the side walls will get cut, but do remember to let them down again when you come onto a motorway or they will get much too hot. We had eight tyre-bursts the day we made this deduction.

You will be well advised to observe the law of the countries you travel through, particularly the speed limits. On no account sell anything to the natives. While in Ismir we heard of a British sailor who, having got insufficiently drunk, tried to sell his boots. The first passer-by was, unfortunately for him, a customs officer and he had, by the time we arrived, already reclined two years in the local gaol.

I hope that these experiences will help you to enjoy your long distance travels. Incidentally, I have a 1933 Sunbeam for sale—ideal for a trip on the Continent—please write to me c/o BASA.

ADRIAN SANSOM



The Sunbeam on a mountain road

EDUCATION IN NORTHERN IRELAND

We recently published two letters from Mr. Edwin Johnston concerning architectural education in Northern Ireland. In particular Mr. Johnston severely criticised the standards of the Belfast School of Architecture, the lack of facilities for town planning and landscape study and post-graduate research, and the system of local authority grants, which often forces students of average means to complete the first three years of their training in a school which is neither recognised nor listed by the RIBA, and which offers no exemptions from the Institute's examinations.

When Mr. Johnston recently revisited his native Ulster, he sent us the following letter, explaining the difficulties facing the Belfast School and the efforts being made to overcome them.

SIR: My recent letter on architectural education has resulted in considerable response, and I should like to point out that my motive was simply to bring to light the present problems concerning the Belfast School. News of recent trends in architectural education in N. Ireland is to some degree encouraging, and, therefore, I wish to outline as concisely as possible the current aims and steps which are being taken to ensure a more satisfactory course in the near future.

The need for a fully recognised school in N. Ireland cannot be over-emphasised and in this respect one can only hope that the current application for RIBA recognition of the Intermediate course will be successful.

The main reason for the failure of the Belfast School to obtain recognition in the past has been the tendency of many of the best students to move to a recognised school in England before reaching Intermediate level. This has resulted in the remaining number of students being inadequate to present a worthy case for recognition.

It is encouraging to observe that the present third year contains thirteen students (as opposed to four in the 1959-60 session), all of whom have had their testimonies approved and have entered for the RIBA external Intermediate examination in May 1961. In addition one local authority has recently made an award of a scholarship for town planning to a Northern Ireland graduate, an example which we hope will be followed by others so that post-graduate research may be encouraged.

The new College of Art for Belfast (now under erection) has been planned to facilitate an eventual five-year course in architecture. After such a successful achievement on the part of Belfast education authority and the R.S.U.A. it is most desirable that the education and university authorities should in due course collaborate, so that the possibility of a Queen's B.Arch. may be realised similar to the B.Sc. awarded to successful technical engineering students. If the School of Architecture eventually became affiliated with Queen's University, Belfast, students would also benefit from an atmosphere which would stimulate cultural activity. Indeed one of the major deficiencies of architectural education in centres other than universities is the insufficient emphasis laid on the wider aspects of the architect's education.

These are only some of the problems which confront the Belfast School of Architecture; others include lack of tradition and reputation, and above all an acute sense of isolation.

In conclusion I should like to emphasise that the opinions expressed in my letters are also those of some of the present Belfast students. Also, as a student from N. Ireland who has been denied an architectural education in a recognised school, I wish the Belfast School every success with its present application for recognition.

EDWIN JOHNSTON

More space will be devoted to this subject next month. Will students who wrote under the pseudonyms "Belfast Opinions" and "Third Year Architectural Students" send their names and addresses (not necessarily for publication) if they want their letters to be included?

BASA TOUR OF SCHOOLS

Some time ago it was decided that a member of the central BASA organising committee should visit every school of architecture in the country. The visits are already well under way in the south and they should be in full swing in the north within the next fortnight. Inevitably any national organisation like BASA must work from a centre, and almost as inevitably this centre must be London. Yet the six big London schools have perhaps less to gain from BASA than those more distant. It was with a particular view to the provincial schools that the BASA facilities were established. One of the main objects of the current visits is the promotion of these facilities, facilities which will not only draw all our schools closer together, but also provide speakers and opportunities for work abroad beyond the capacity of the smaller provincial schools. These facilities are available to part-time as well as full-time schools.

In July this year the IUA Congress comes to London, bringing over 2,000 architects and many students from abroad. The chance of hearing speakers like Pier Luigi Nervi and Henry Russell Hitchcock should not be missed. Students who can afford the stiff conference fee should contact BASA at the Building Centre for help over "digs," or ask our representative when he visits your school.

Architectural education has always been one of the main preoccupations of BASA, and our representative will explain the conclusions and policy resulting from the series of conferences on the subject organised by the Association. Come and join in the next "confab," at York this September.

So when you see the posters announcing the visit to your school, go along to the meeting and find out just what BASA can offer you (and vice versa, we hope!). We think you will find it well worth the 5s. annual subscription.

BASA FACILITIES

The Lecture Pool is available to any School wishing to use it. BASA supplies subsidised lectures on request to the organising secretary, Graham Lees, at the R.W.A. Bristol, 25 Great George Street, Bristol 1.

Travelling Exhibitions

The response to this scheme has been very disappointing. The system evolved at the Oxford Conference is foolproof. To stimulate Schools into seriously considering their exhibition circuits as important, BASA is willing to give a 50 per cent subsidy for the cost of producing slides. The cost of preparing slides is not in itself expensive, one roll of colour film providing 36 slides complete for the cost of 30s. All necessary information on taking slides has been circulated and further copies will be sent on request.

It is BASA policy that the Schools break down the unnatural barriers between them and gain from the exchange of vital ideas.

The travelling exhibition is only one way of achieving this.

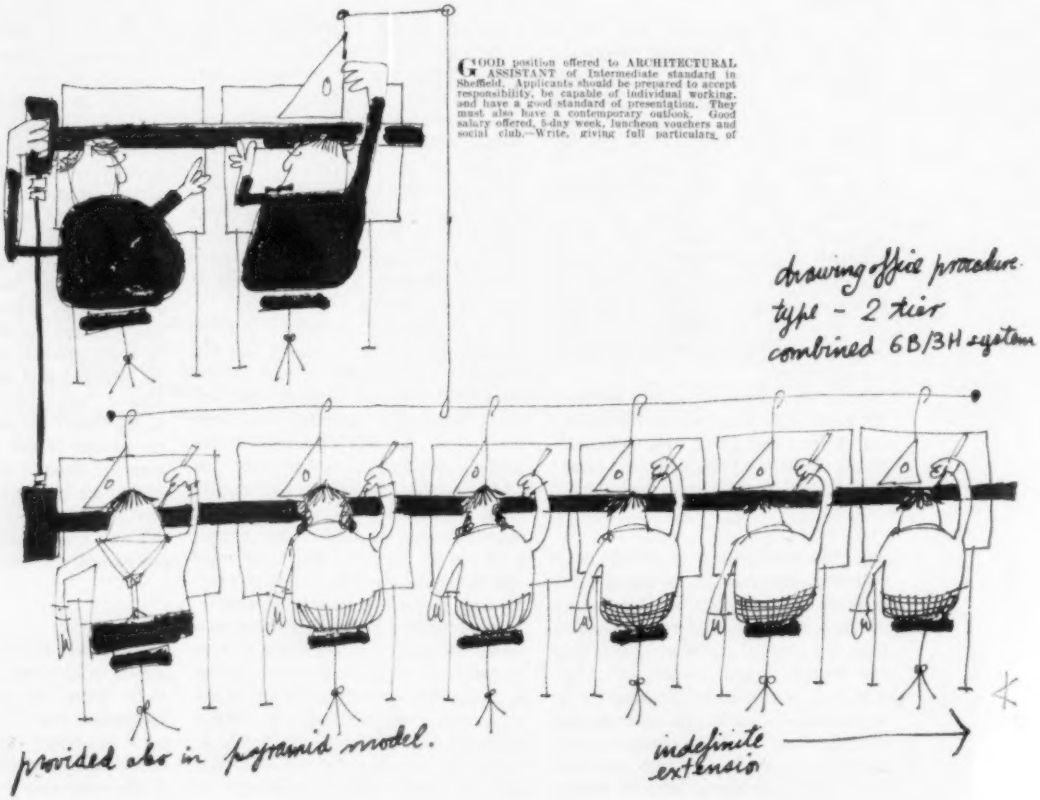
It is now up to the Schools to contact their local secretaries if this scheme is to succeed.

VACATION WORK ABROAD

The normal architectural education syllabus in England allows only limited office experience—office practice itself being, nevertheless, an important part of a student's education as an architect. The vacations offer time in which to travel and gain additional experience; but ideally an opportunity of working and living abroad provides the means for architectural knowledge which could not be gained in England.

An international "clearing house" of work for students has been established through International Association for the Exchange of Students for Technical Experience offers a wide variety of jobs. Working with IAESTE scheme, and as far as possible selecting the most advantageous situations here and abroad (working permits, etc., being provided through IAESTE), BASA hopes to establish a wider international exchange than before by finding more jobs for students in England and in this way creating more openings abroad.

Would all architects willing to offer work to foreign students please write to the Secretary, BASA, The Building Centre, Store Street, London, W.C.1?



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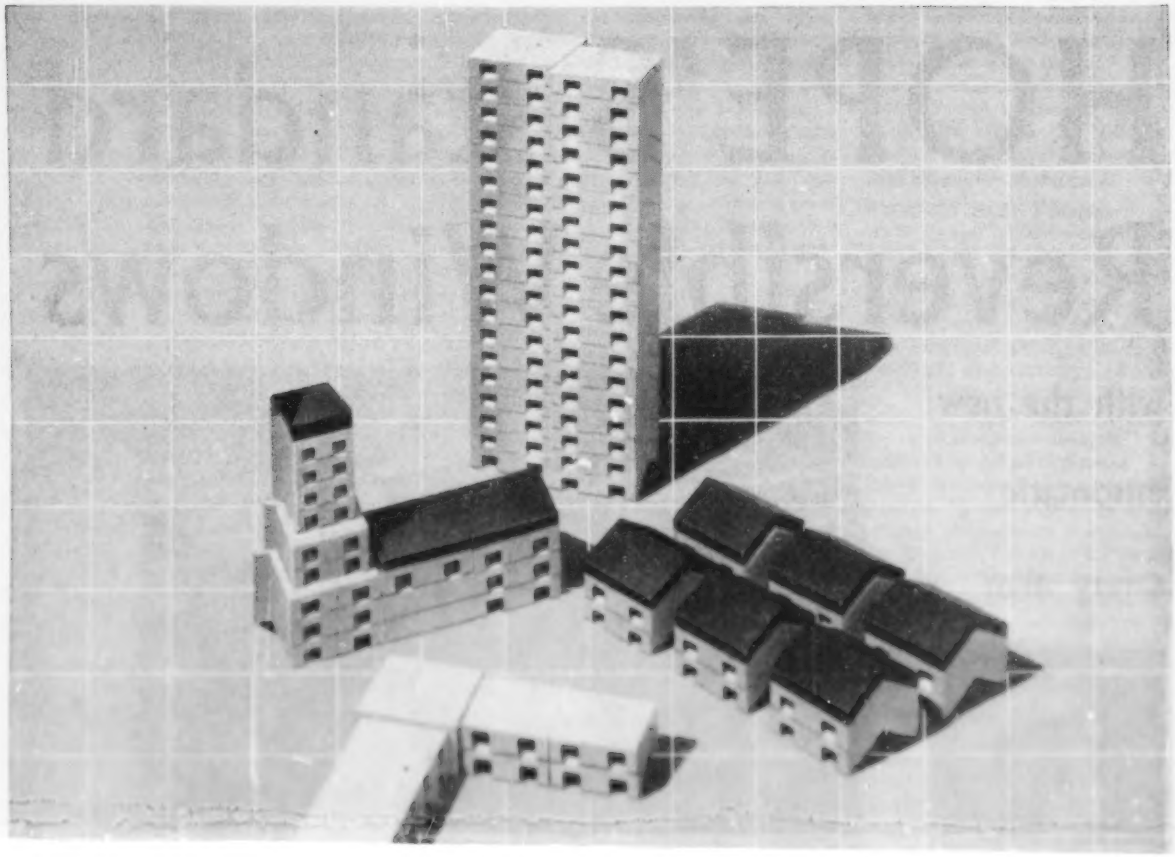
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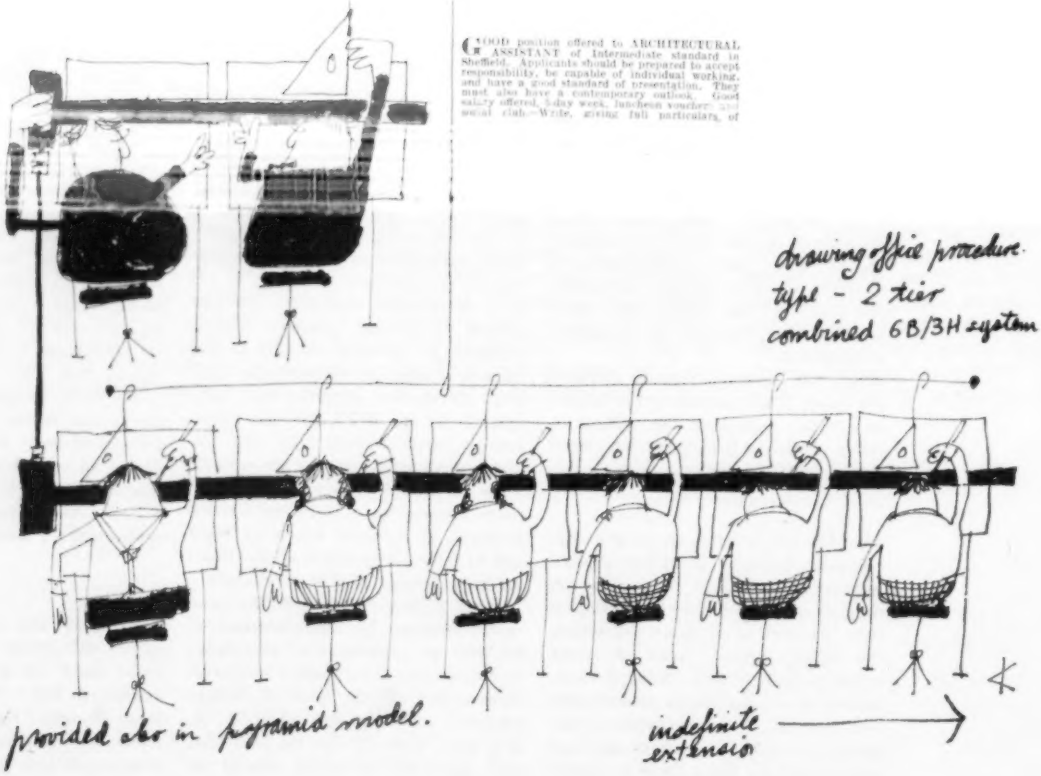
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Contract administration

construction drawings 21

Key drawings: or reference general layouts should be built up with the following points in mind:—

1. They are not details of construction but reference drawings to supporting information which will be in the form of details, schedules, or Bills of Quantities.

2. They should show only dimensions sufficient to prepare the site, to set out the building in carcase form, and read as complementary documents to layouts prepared by consultants.

3. They should give written general in-

Construction details: which in the first instance are prepared in draft form as your own investigation drawings, will probably cover all of the building exhaustively. As such, they should be produced quickly for early exchange with consultants and can be frankly "rough," marked "rough," and to a common scale which will ultimately be sensible for all details (probably 1½ in. or 3 in.). By saying "exhaustively" I mean the details should be investigated three dimensionally and by "exploded" view as well as to scale if junctions are

which can be passed to the quantity surveyor and finally issued to the contractor? They should be the minimum number of drawings which give all information.

Since all this information is inevitably read together by the client, the estimator and the general foreman on the site, there is a strong argument in favour of putting the schedules and the construction details on the same sheet as the key drawing and this should be done wherever possible. In any case it should be possible to put all the

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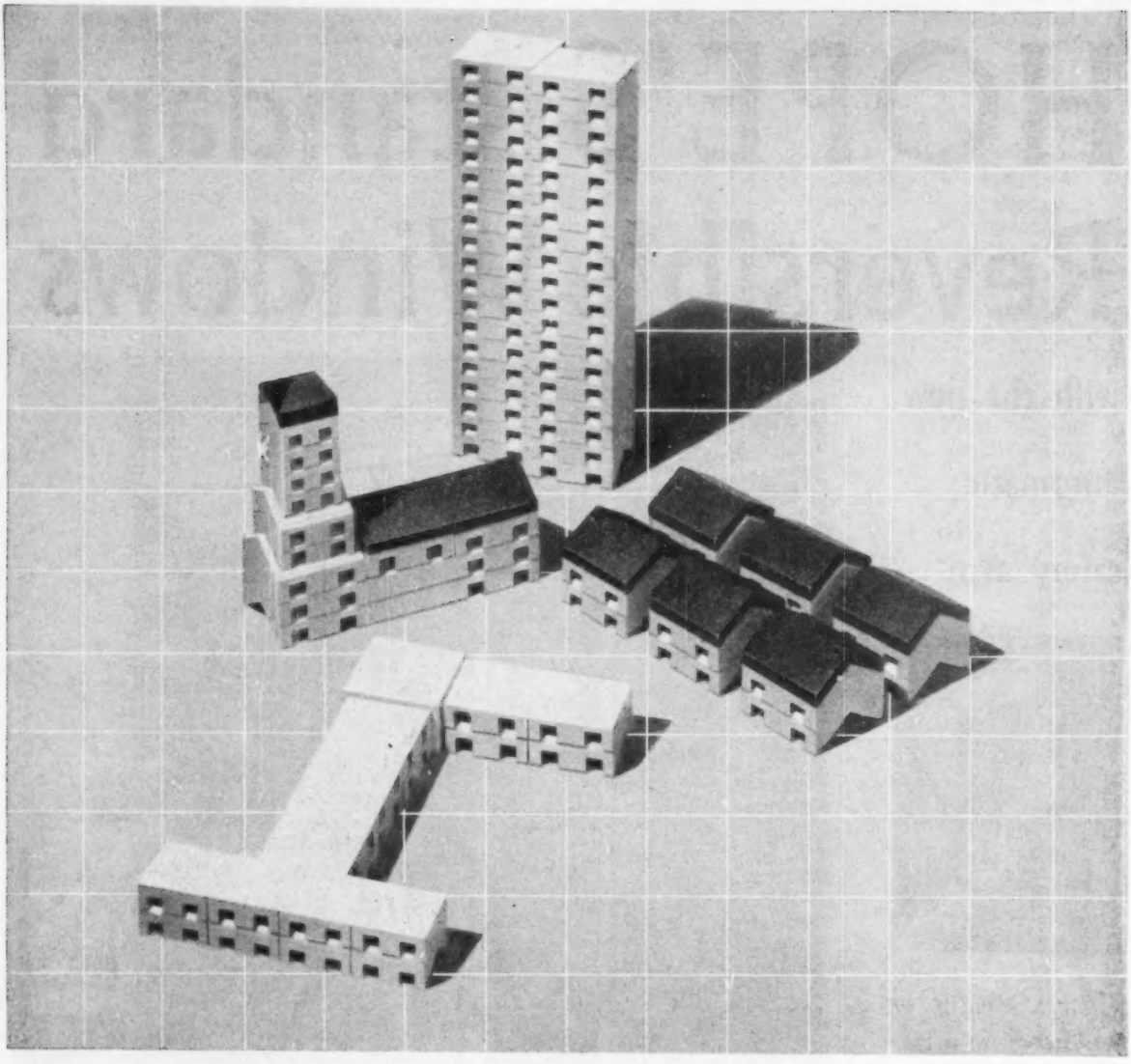
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Key drawings: or reference general layouts should be built up with the following points in mind:—

1. They are not details of construction but reference drawings to supporting information which will be in the form of details, schedules, or Bills of Quantities.

2. They should show only dimensions sufficient to prepare the site, to set out the building in carcase form, and read as complementary documents to layouts prepared by consultants.

3. They should give written general information related to the carcase only, but where services consultants are not supplying separate service layout drawings, they should show main service runs.

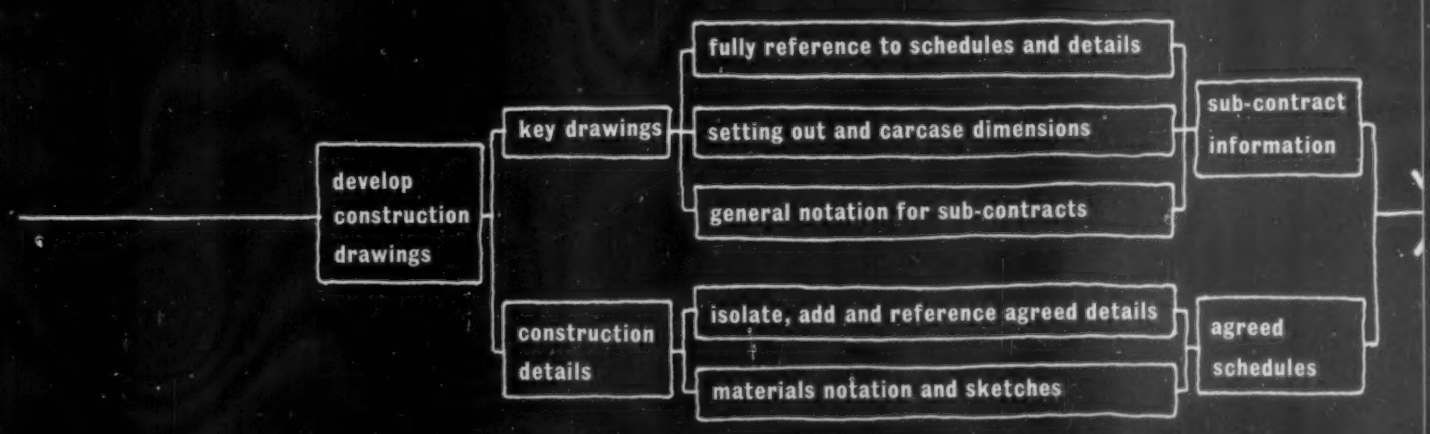
4. Their primary function is to carry accurate and comprehensive cross references to details, other people's drawings and all scheduled items. The scale should be chosen accordingly ($\frac{1}{8}$ in. or $\frac{1}{4}$ in. maximum).

Construction details: which in the first instance are prepared in draft form as your own investigation drawings, will probably cover all of the building exhaustively. As such, they should be produced quickly for early exchange with consultants and can be frankly "rough," marked "rough," and to a common scale which will ultimately be sensible for all details (probably $1\frac{1}{2}$ in. or 3 in.). By saying "exhaustively" I mean the details should be investigated three dimensionally and by "exploded" view as well as to scale if junctions are to be fully appreciated visually and constructionally—this includes services as well as solving architraves hard against a partition, for example. Draft schedules should run concurrently in order to assess the construction implications.

Contract drawings: are all these items developed to represent a statement of agreed information (including your Party Settlement Agreements) which can be passed to the quantity surveyor and finally issued to the contractor? They should be the minimum number of drawings which give all information.

Since all this information is inevitably read together by the client, the estimator and the general foreman on the site, this is a strong argument in favour of putting the schedules and the construction details on the same sheet as the key drawing and this should be done whenever possible. In any case it should be possible to put all the schedules and construction details related to a particular key drawing on the one sheet. Most site problems arise from isolated documents.

But whichever way it is done, the details need only be traced from the agreed roughs, eliminating yards of cavity wall which say nothing, but keeping the three dimensional sketches.



SfB No. B
UDC No. 651:69

Contract administration

public services 22

As soon as the key drawings have reached a sufficiently detailed stage to explain proposals, they should be discussed with or copies sent to the appropriate public service authorities Information on those services which exist on the site can then be plotted on the drawings and the authority can make recommendations and submit estimates (three copies for later distribution) for extending the service to the new property.

You will need to discuss the following with the various authorities:—

Water

Size, materials, depth, position and pressure of existing service; meter pit requirements and materials; water storage requirements or other recommendations; arrangements which can be made for builder's supply.

Drainage

Size, materials and invert levels of existing drains; positions at which storm water drain and soil drains can be entered and, where applicable, recommendations on materials and construction other than the byelaw minimum.

Electricity

Capacity, protective material, position and/or depth of existing service metering arrangements and types of service required.

Transformer positions, possible amendment or resiting requirements.

Gas

Size, material, depth and position of existing service; metering requirements.

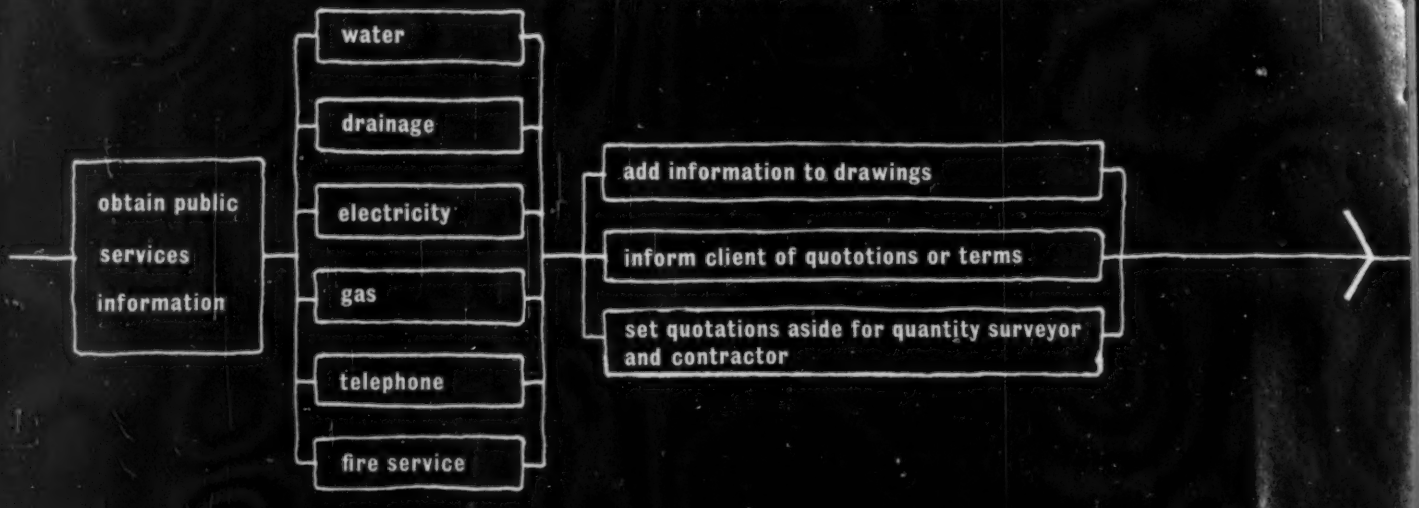
Telephone

Position and/or depth of existing services and recommendations on installation and siting of equipment.

Fire Service

In conjunction with water services, recommendations on dry risers—sizes and pressures—type of equipment, valves and access, etc., and suggested positions for lightning conductors.

The information required from each should also include any regulations on fittings, rates, maintenance accessibility and suggested duct sizes, the division of costs for the works, the amount of builder's work required for the service with the description for inclusion in the Bill of Quantities; what notice is required for commencement of works, how long it will take to complete the work; arrangements for testing on completion and any other relevant information.



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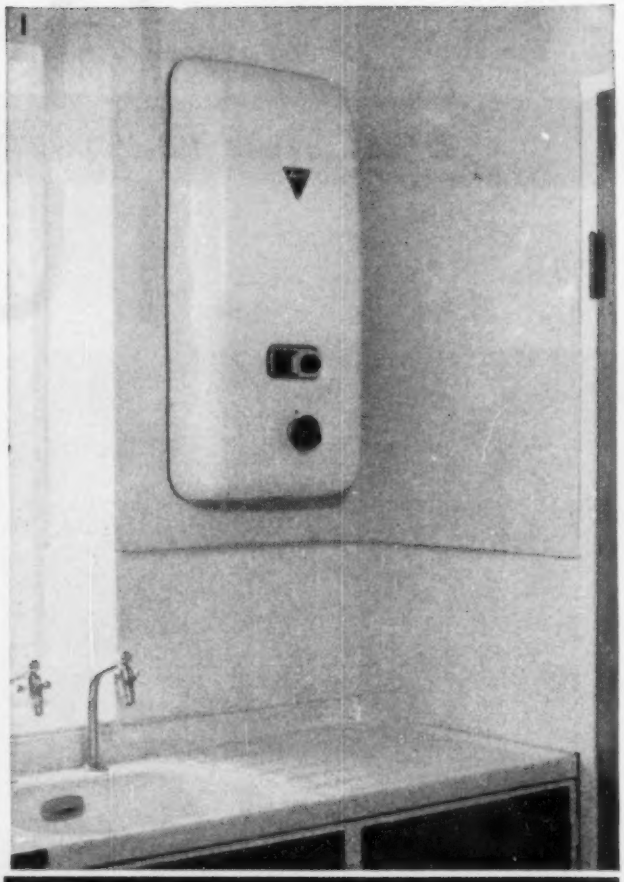
Architects:
George E. Clay and Partners, A/A.R.I.B.A. Chartered Architects and Surveyors, Gravesend and Rochester.

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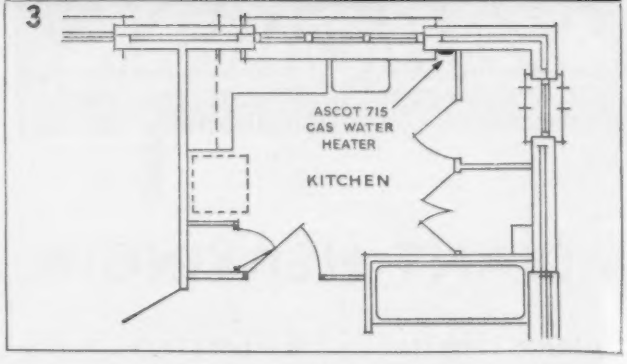


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1. *Ascot 715 "balanced flue" multipoint installed over the draining board in a flat kitchen.*
2. *Front elevation of a two-storey flat unit at Eltham.*
3. *Plan view of a first-floor flat kitchen showing position of Ascot 715.*







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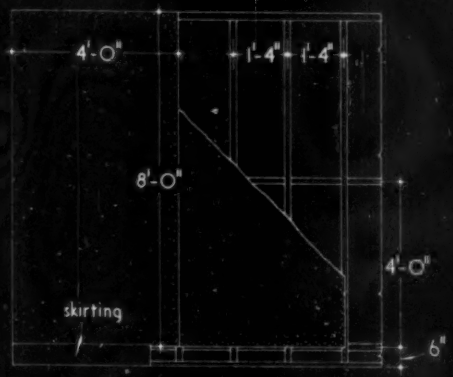
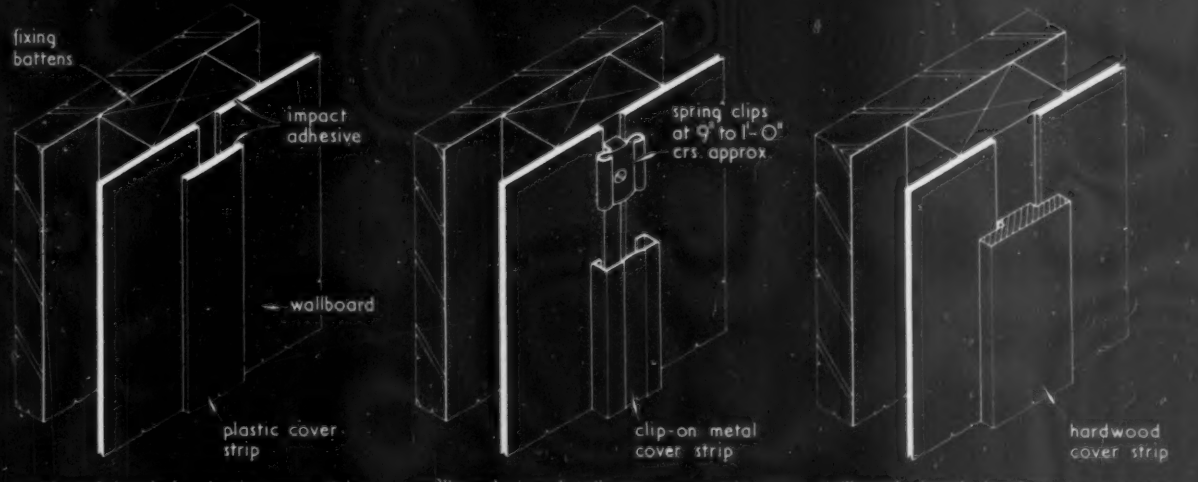


diagram showing typical spacing of battens for wall facing or partioning

TYPICAL FIXING DETAILS FOR PANELLING



wallboard bonded : plastic cover strip wallboard pinned : clip-on cover strip wallboard pinned : hardwood cover strip

METHODS OF JOINTING.

WARERITE WALLBOARD : GENERAL DATA 1. Manufacturer : Bakelite Limited

15.S1 ·WARERITE· WALLBOARD: GENERAL DATA 1

This Sheet describes Warerite wallboard, its properties, appearance and basic fixing methods. Sheet 15.S2 gives further details of treatments at dados, cornices and corners and the application of the wallboard to furniture and fittings.

Description

The wallboard consists of a decorative melamine laminated surface on a high-density wood-fibre base. It is strong, rigid and light in weight and although non-loadbearing, it is self-supporting when correctly fixed according to the manufacturer's recommendations. The boards are dimensionally stable, both surfaces being impregnated with resin which reduces the tendency to warp or bow. The maximum dimensional increase as a result of high-humidity laboratory tests is 0·56 per cent.

The decorative surface is resistant to moisture, acids, alkalis, petrol and all common organic solvents. It is unaffected by weak organic acids (fruit juices, vinegar, etc.) or dilute alkalis (detergents, ammonia) but it should not be exposed to prolonged contact with strong acids (sulphuric, hydrochloric, nitric) or alkalis (caustic soda, lime).

Sizes

The boards are 8 ft. 0 in. long by 4 ft. 0 in. wide by $\frac{1}{8}$ in. thick.

Weight

The weight of the wallboard is approximately 73·6 lb./cu. ft.

Cross Breaking Strength

The minimum cross breaking strength is 6,800 lb./sq. in. and the maximum is 11,550 lb./sq. in.: average = 8,825 lb./sq. in.

Thermal and Sound Insulation

The material, which has relatively low conductivity, can be used as interior linings in a similar manner to hardboard. By providing an air space between the board and the outer wall an appreciable degree of insulation is obtainable: by combining this arrangement with one of the many types of insulating materials, good thermal- and sound-insulating properties can be given to the lining.

Spread of Flame

The wallboard has been tested in accordance with B.S. 476 and given Class II classification.

Working and Finishing

Cutting: The wallboard can be satisfactorily cut with an ordinary woodcutting tenon saw or a fine-toothed panel saw. Where power tools or a circular saw are used a blade with fine teeth and minimum set should be selected to prevent flaking or chipping. The wallboard should always be cut with the decorative surface uppermost.

Drilling and hole-cutting: Normal woodcutting drills, bits and keyhole saws may be used but an engineer's twist drill or portable router are preferable to ensure clean-cut edges quickly and easily.

Edge finishing: A woodcutting plane, file or sanding block can be used to finish the edges of boards.

Fixing

2 in. by 1 in. vertical battens of prepared softwood or suitable hardwood should be provided at 1 ft. 4 in. centres as shown in the diagram on the upper face of the Sheet. These may be plugged direct to the brickwork or, in existing buildings, to a plaster wall. For the best results the battens should be set true and fair. The wallboard may be pinned or bonded to the battens allowing a $\frac{1}{4}$-in. gap between boards to take up any movement due to atmospheric changes, and the joints masked by coverstrips. Alternatively, the wallboard can be held in special sections which retain the edges of the boards and cover the joints at the same time.

Pinning: The edges of boards should be pinned at 6 in. to 9 in. centres and cover strips of wallboard wood, plastic or metal screwed or nailed through the expansion gap, as described under *Bonding*. Where full-size sheets of wallboard are to be fixed a combination of bonding and pinning is recommended.

Bonding: An impact-type adhesive should be used and the use of a few panel pins also is recommended. Cover strips of wallboard or other material can be bonded to the boards and pinned through the expansion gap. Alternatively wood, metal or plastic cover strips can be screwed or nailed to the battens through the expansion gap, care being taken to avoid penetrating the wallboard.

Bonding direct to plaster or brick walls is not recommended, but battens can be dispensed with when fixing to a wall or partition of timber-framed matched boarding or plywood that is reasonably level.

Special sections: Where these are used, care must be taken to ensure that there is no restriction of movement of the boards, especially where atmospheric changes are marked, e.g. in bakehouses, public baths etc. The drawing on Sheet 15.S2 gives examples of this type of fixing.

It is not normally necessary to condition the wallboard before installation, but in new buildings where wet conditions prevail, it is advisable to store the boards near their ultimate location for at least 24 hours.

Applications

In addition to its use for interior linings and facings, the wallboard may be used for furniture and fittings and for the facing of flush doors (see Sheet 15.S2).

Finish and Colours

The surface has a medium gloss finish and is available in a number of standard patterns and colours. The patterns and colours are normally on one side only. Other patterns and colours can be obtained to order where sufficient quantities justify special manufacture.

Maintenance

The hard, impervious surface is readily cleaned of dust and dirt with a wash-leather, while soap and water can be used on surfaces which have become greasy without ill effect. Domestic solvents, or cleaners such as petrol, can be safely used to remove superficial stains or ingrained deposits caused by scuffing.

Compiled from information supplied by:

Bakelite Limited
Address: Watton Road, Ware, Herts.
Telephone: Ware 3202.

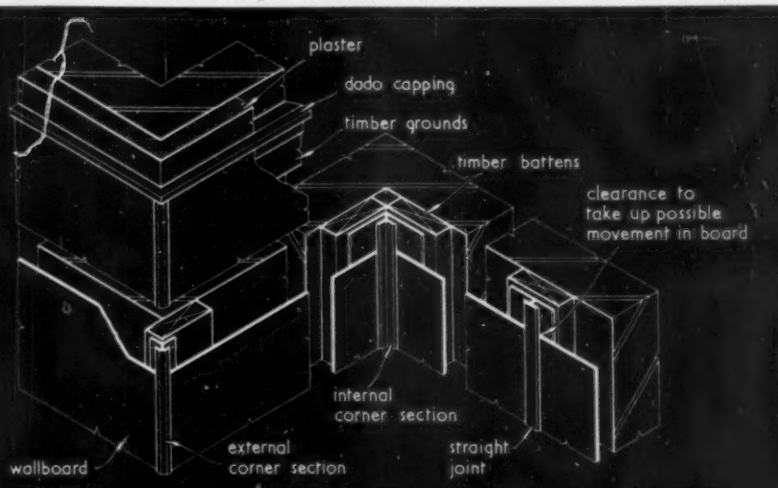
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(42) R

SHEET MATERIALS | PLASTICS | GENERAL DATA

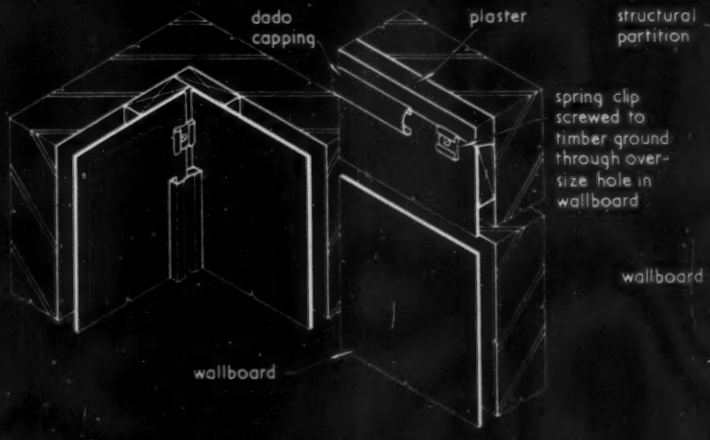
15.S2

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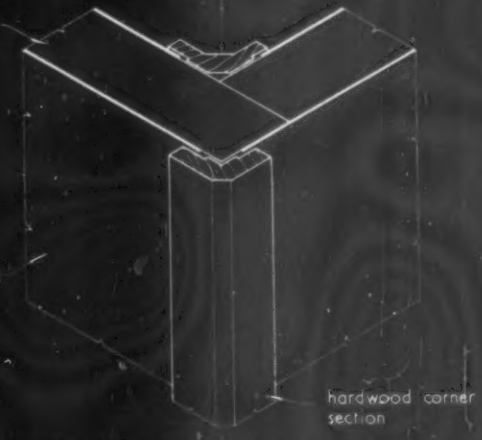




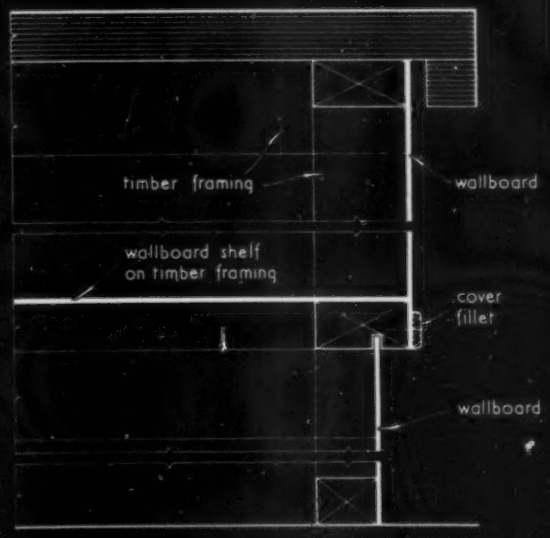
DETAILS SHOWING USE OF METAL OR PLASTIC JOINTING SECTIONS



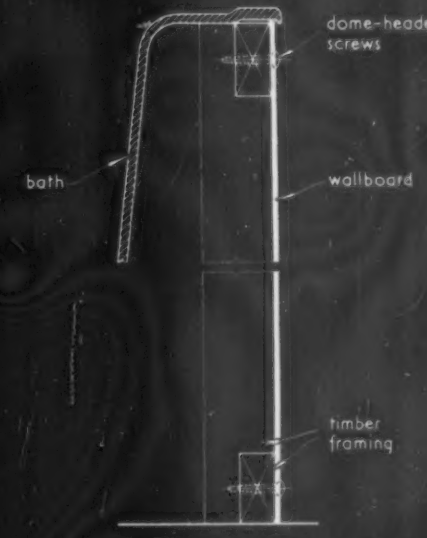
DETAILS SHOWING USE OF CLIP-ON COVER STRIPS



DETAIL OF CORNER OF WALLBOARD-FACED PARTITION



DETAIL OF TYPICAL TIMBER-FRAMED COUNTER



DETAIL OF TYPICAL BATH PANEL

WARERITE WALLBOARD : GENERAL DATA 2. Manufacturer : Bakelite Limited

15.S2 ·WARERITE· WALLBOARD: GENERAL DATA 2

This Sheet is the second describing Warerite wallboard. It should be read in conjunction with Sheet 15.S1 which describes its properties, appearance and the basic methods of fixing the wallboard as wall lining. The drawings on the face of this Sheet show typical treatments at dados, cornices and corners and the application of Warerite wallboard to furniture and fittings.

Description

The wallboard consists of a decorative melamine laminated surface on a high-density wood-fibre base. It is strong, rigid and light in weight and although non-loadbearing, it is self-supporting when correctly fixed according to the manufacturer's recommendations. The boards are dimensionally stable, both surfaces being impregnated with resin which reduces the tendency to warp or bow. The maximum dimensional increase as a result of high-humidity laboratory tests is 0·56 per cent.

The decorative surface is resistant to moisture, acids, alkalis, petrol and all common organic solvents. It is unaffected by weak organic acids (fruit juices, vinegar, etc.) or dilute alkalis (detergents, ammonia) but it should not be exposed to prolonged contact with strong acids (sulphuric, hydrochloric, nitric) or alkalis (caustic soda, lime).

Sizes

The boards are 8 ft. 0 in. long by 4 ft. 0 in. wide by $\frac{1}{8}$ in. thick.

Wall Lining

As described on Sheet 15.S1, vertical battens should be provided at 1 ft. 4 in. centres plugged direct to the brickwork or, in existing buildings, to a plaster wall. Additional vertical battens must be provided at corners, as shown in the drawings on the face of the Sheet, to provide grounds for the corner sections. Horizontal battens should be provided where necessary for dado cappings and cornices. The clips of the patent clip-on cover strips illustrated must be adapted at corners and dados by removing the small tongues that are normally inserted in the joints between boards (see Sheet 15.S1). Fixing for wall-lining can be by bonding or pinning or a combination of both, as described in detail on Sheet 15.S1.

Partitioning

Wallboard can be used for covering partitions in the same way as for wall lining. Where the partition is of timber-framed matched boarding or plywood that is reasonably level, fixing battens can be dispensed with and the wallboard bonded directly to the partition.

Flush Doors

Panelled doors can be readily converted into flush doors by facing them with Warerite wallboard. This can be carried out by bonding or pinning the boards while the door is in position but it is normally more convenient to take the door down. The wallboard should then be bonded with an impact-type adhesive, which will ensure that once the wallboard has been pressed into position it remains firmly fixed and requires no sustained clamping. The adhesive also provides a flexible bond which will take up any movement resulting from the exposure of each side of the door to different conditions, for example, where it is between a bathroom and a landing.

Furniture and Fittings

Where wallboard is used for furniture and fittings the frame and panel method of construction is normally employed. If required, however, the wallboard can be used as cladding over structures of solid timber, plywood, chipboard, insulation board, etc. The wallboard can be secured by screwing, pinning, various types of moulding or by bonding with impact-type adhesive. A combination of bonding or pinning and coverstrips or mouldings gives satisfactory fixings and a neat appearance. The drawings on the lower face of the Sheet show two examples of such fixings: a typical bar or counter and a panelled-in bath.

Finish and Colours

The surface has a medium gloss finish and is available in a number of standard patterns and colours. The patterns and colours are normally on one side only. Other patterns and colours can be obtained to order where sufficient quantities justify special manufacture.

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working detail

GLAZED PARTITION: OFFICES IN LONDON, W.1

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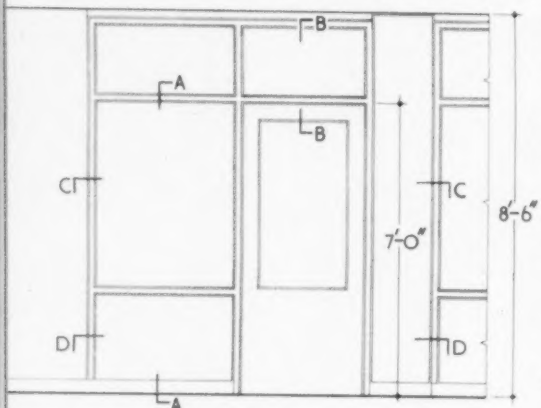


This glazed partition is characterized by its neat detailing at the junctions between its timber framing and the breeze block partition wall.

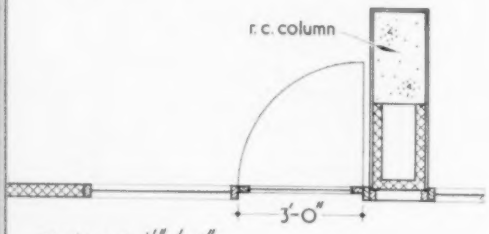
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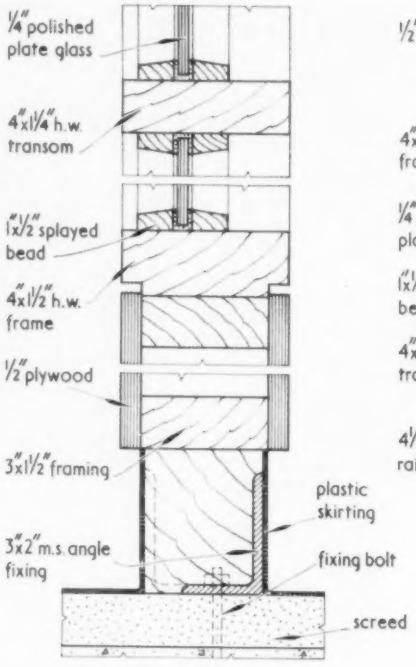
Eero Saarinen and Associates in association with Yorke, Rosenberg and Mardall, architects



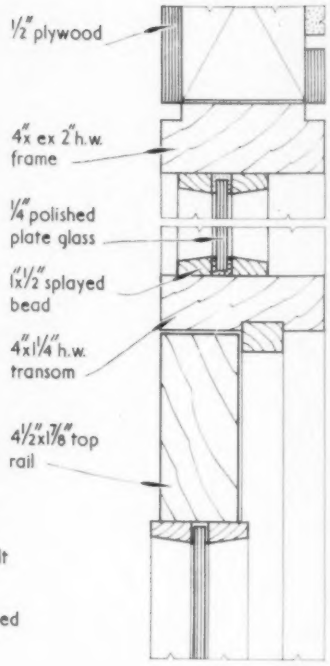
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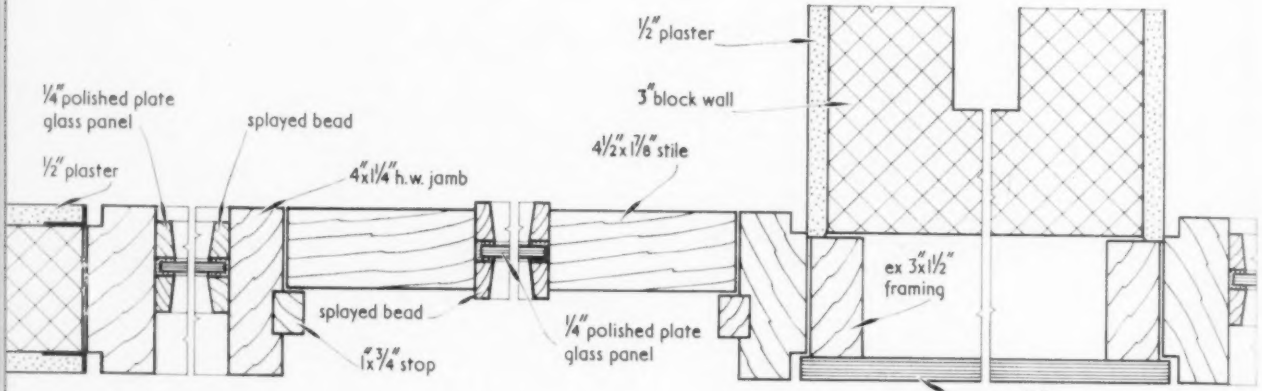
PLAN. scale 1/4"=1'-0"



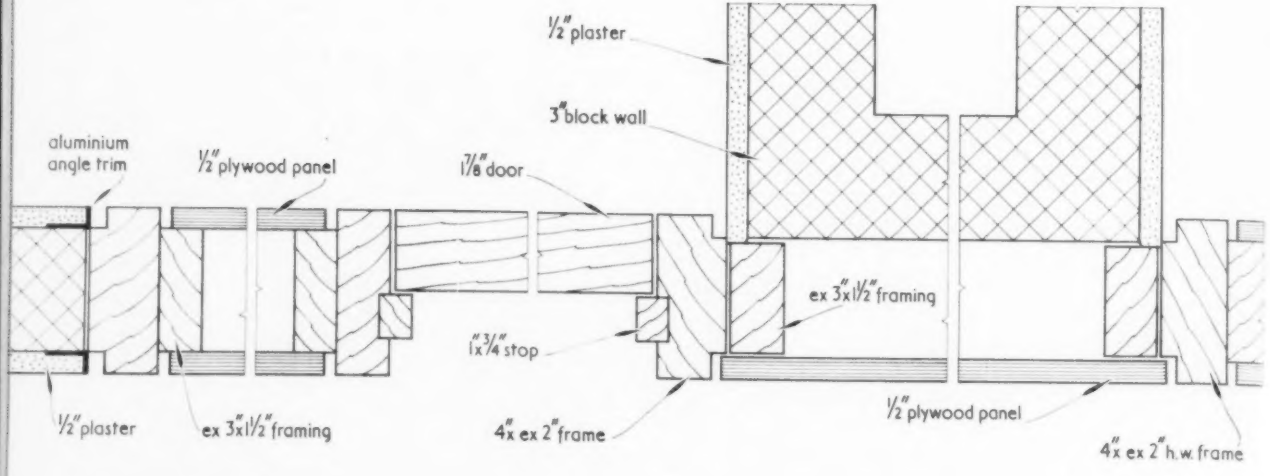
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SECTION B–B.



PLAN AT C–C. scale 1/4 full size



PLAN D–D. scale 1/4 full size

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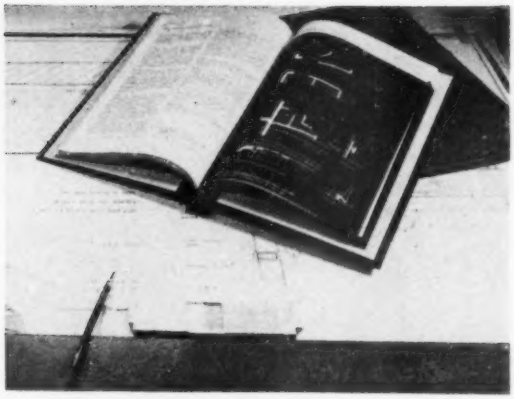
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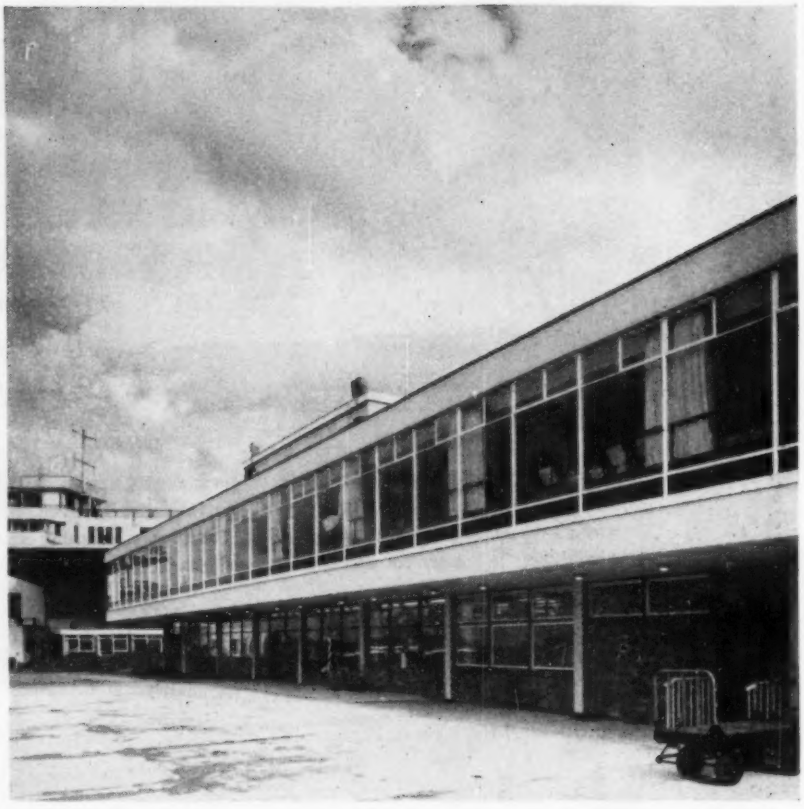


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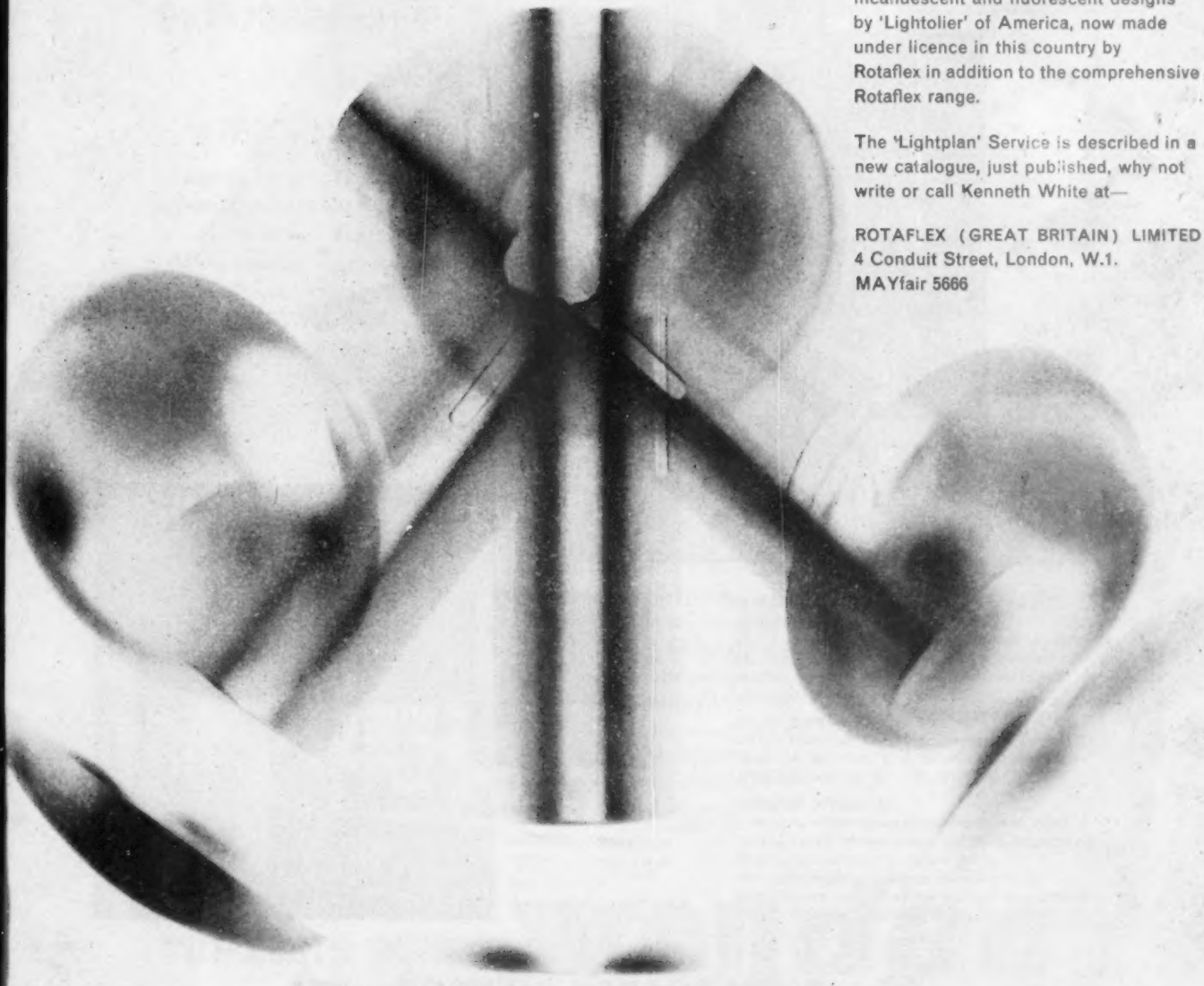
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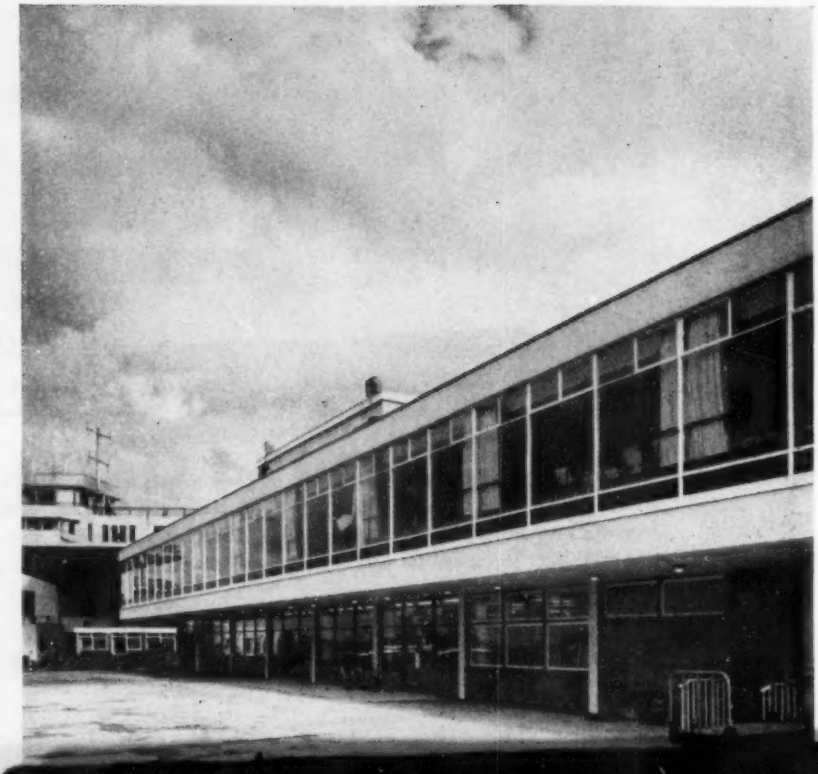
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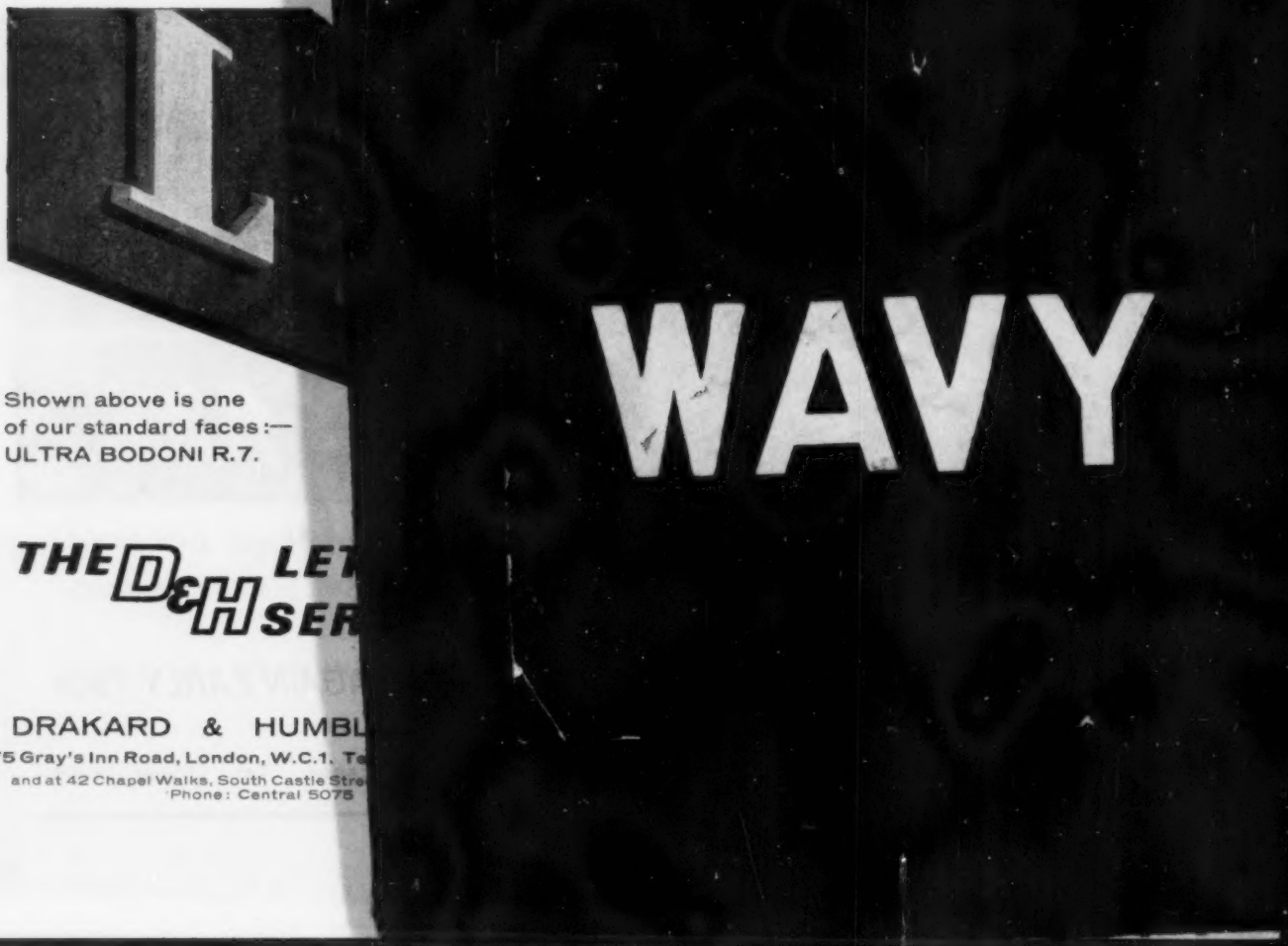


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New Passenger Building at Birmingham Airport



This building, which has just been brought into use, was designed by Norman and Dawbarn, architects and consulting engineers, as an extension to the original terminal beyond, for which they were responsible in the thirties. Made necessary by the increase in traffic, the building is designed as a simple rectangle readily capable of extension, and connected to the existing terminal by an enclosed walkway. The ground floor is one open area divided by demountable partitions for the customs, health and immigration processing of passengers, planned in such a way as to allow alterations with the minimum of disturbance. A staircase from the public enclosure provides access to a viewing gallery, bar and restaurant on the first floor. The modernisation scheme also includes alterations to the existing terminal, a new apron for aircraft and the enlargement of the facilities at the airport for vehicle access and parking.



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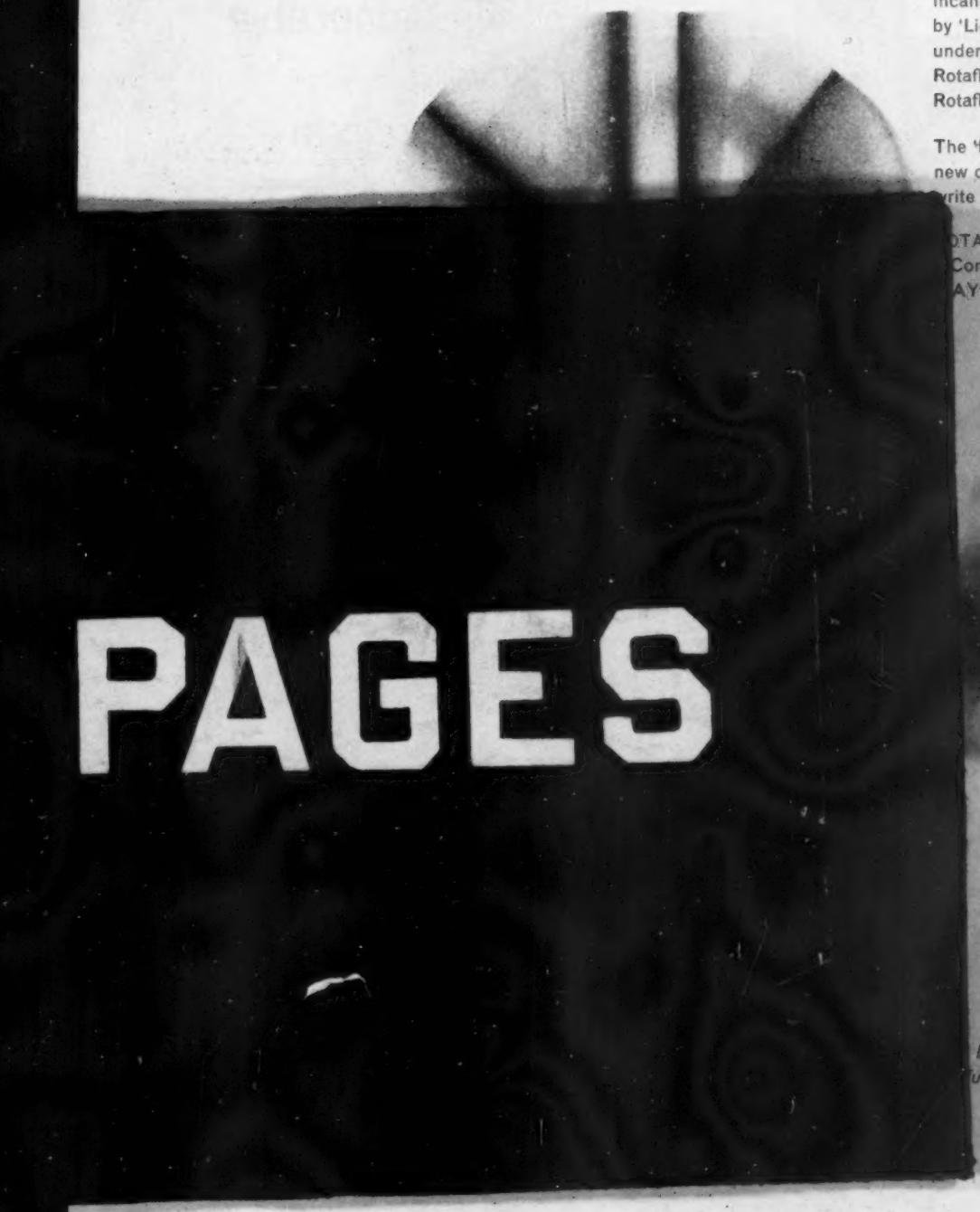
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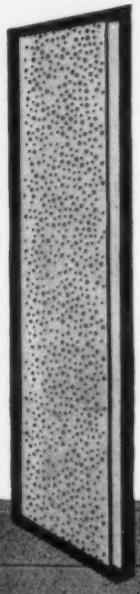
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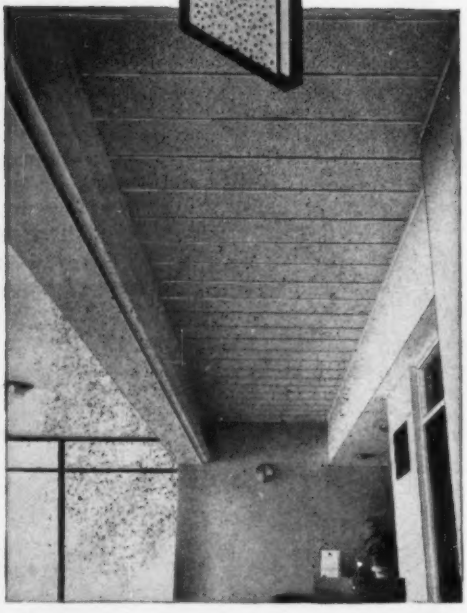


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Architect: J. Houghton A.R.I.B.A., Hull
Main Contractors: Geo. Houlton & Sons, Ltd., Hull
Ceilings by: Dawber, Townsley & Co. Ltd., Hull

Ankarboard Acoustics are available as boards or tiles ½" or ¾" thick in regular or random perforations. Regular perforations are 4 m/m at 15 m/m centres and random perforations are 4 m/m and 7 m/m holes. Holes are of the necessary depth to provide maximum acoustic correction.

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Fixing Contractor: Rudders & Paynes Ltd., Birmingham

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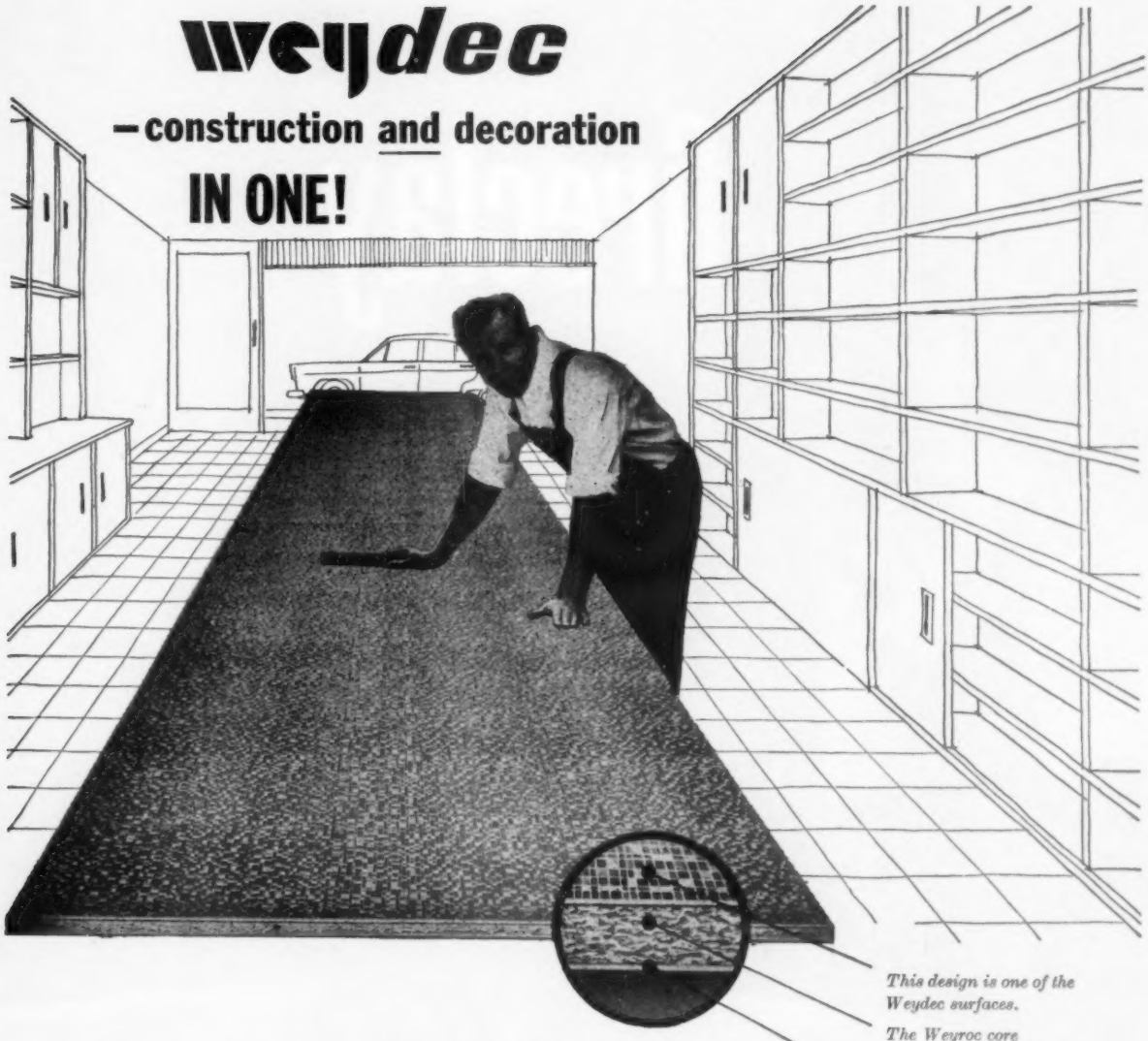
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THE ARCHITECTS' JOURNAL for May 4, 1961

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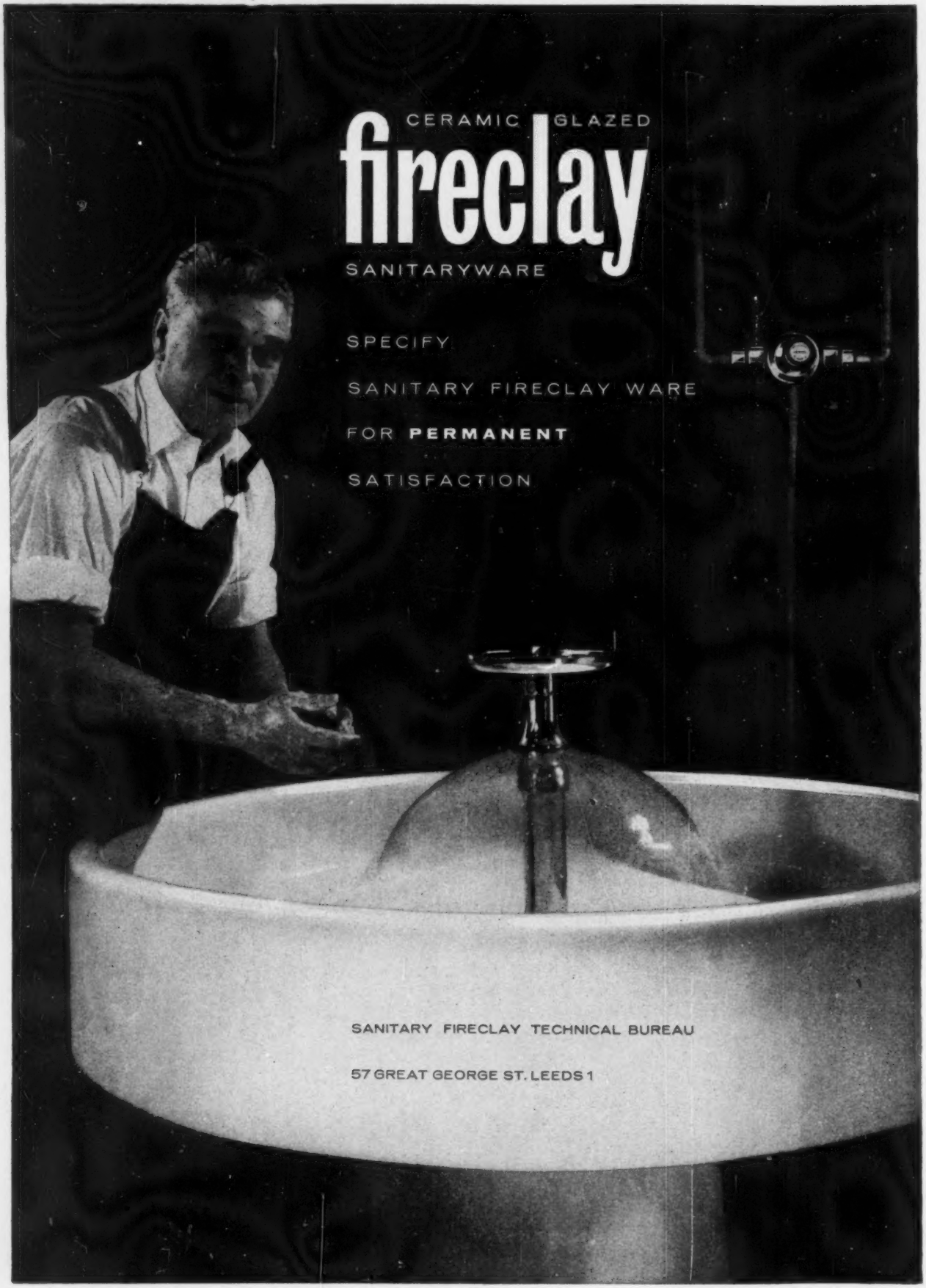
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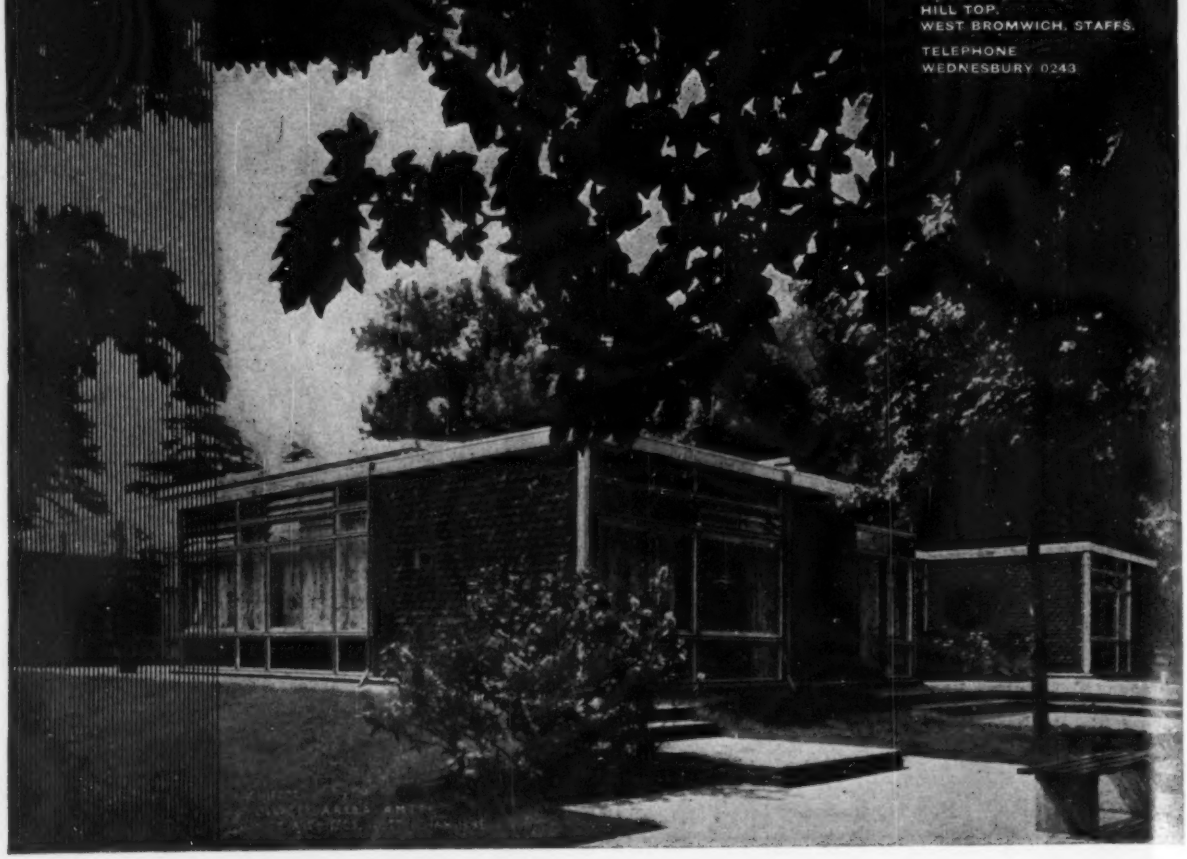
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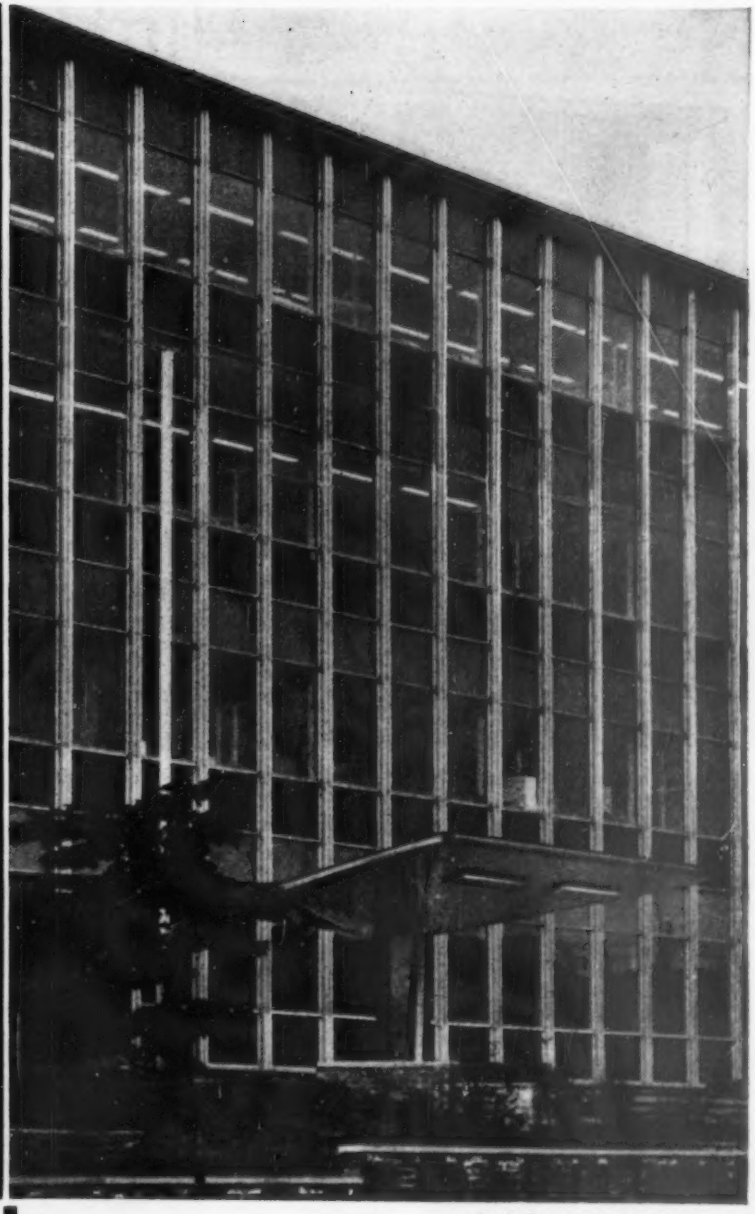
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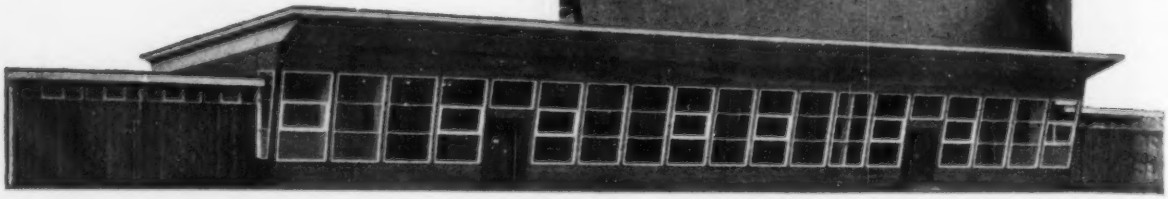
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News from Hull

Luxury Flats and Offices in a Nash Crescent

'Standard' equipment used extensively



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ELLIS (KENSINGTON) LIMITED

A new block of luxury flats and offices will shortly be completed in Park Crescent, W.1—the lovely crescent near Regent's Park, famous for its fine Nash houses. The west side of the crescent was heavily damaged by enemy bombing during the war, and to preserve the character of the crescent the frontage has been rebuilt exactly to the original Nash design.

The block, which has been developed by Portland Estates Ltd., provides over 55,500 square feet of office space. There are also on the site 92 luxury flats of one, two, or three rooms, kitchen and bathroom.

In each bathroom there is an elegantly styled 'Standard' Lowline bath finished with high quality porcelain enamel. The Lowline has three possible tap positions and hand grips are optional. The wash basin is the 'Standard' Kingston mounted on chromium plated legs (although it can be wall hung or fixed on a pedestal) made from durable vitreous china. The 'Standard' Kingston double trap siphonic low level closet suite. also of vitreous china, completes the sanitary fittings in these bathrooms. 'Standard' equipment has also been used extensively in the luxurious offices. Devonian wash basins, Vitural slab urinals and Sano wash down closet suites all made from vitreous china have been used in the washrooms.

The advantages to the planner of using 'Standard' equipment in offices and domestic dwellings are obvious.

Firstly, the equipment is well designed. Both the Lowline bath and the Kingston range are outstanding examples of all that is best in modern bathroom equipment. The Vitural slab urinal is a great advance in existing urinal design and is the first full length slab to be made from vitreous China.

Secondly, 'Standard' items are made from vitreous china. This is more hygienic than ordinary ware—as it is non-absorbent, it is impossible for germs to lodge and breed in it.

Thirdly, 'Standard' equipment is extremely durable. It keeps its good looks for many years and replacement is rare so that it is more economical in the long term than other equipment. For these reasons 'Standard' sanitary fittings are being specified by architects for more and more hotels, public buildings, houses, factories, offices and schools, as each month passes.

546



The Lowline bath



The Kingston wash basin



The Kingston low level closet suite



The Vitural slab urinal



The Sano wash down closet suite



Crown 75 was too good... it earned us a black mark.

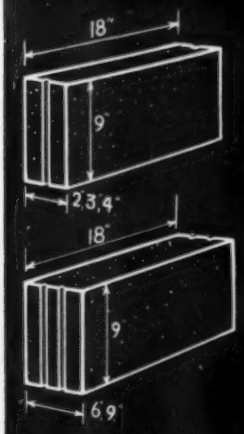
The demand for Crown 75 surprised even us:—and our trouble has been to keep pace with it. As a result we have got black marks for delivery. That phase is now over. We began making Crown 75 two years ago on one plant; a year ago we got a second into production; we now have three. Now, we *can* keep pace and can offer short deliveries. In fact, we are ready to deliver Crown 75 when you want it, where you want it and in any quantity you ask for. So you, the architect can specify Crown 75 with certainty of not having to accept 'or equal' — for there *is* none.

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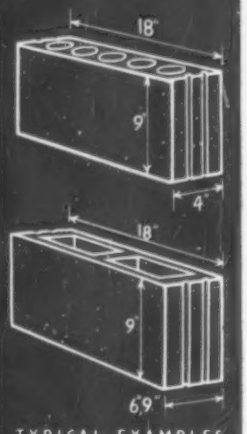
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4" Lignacite skim plastered one side	·33
11" cavity wall, 4½" brick, air space, 4" Lignacite skim plastered one side	·22
9½" cavity wall, 4½" brick, air space, 3" Lignacite skim plastered	·25
11" cavity wall, 5½" Rock-faced Lignacite, air space, 3" Lignacite skim plastered	·176

TECHNICAL SPECIFICATIONS BASED ON SOLID LIGNACITE

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2. **COMPRESSIVE STRENGTH** at 28 days **500 lbs./sq. in.**
3. **DRYING SHRINKAGE** **0.06%**
4. **MOISTURE MOVEMENT** . . . **0.05%**
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6. **COMBUSTIBILITY** · **Meets combustibility requirement of B.S. 476 : 1953 part 1. "Fire Tests on Building Materials and Structures".**
7. **SPREAD OF FLAME** . . . **As detailed in appendix to B.S. 476 : 1953 = Class 1.**
8. **FIRE RESISTANCE** . **Resistance of test wall 4½" thickness with one face skim-plastered as detailed in B.S. 476 : 1953 part 1, equals 4 hours 7 minutes.**
9. **SOUND REDUCTION** . . **Sound reduction of party walls constructed of two leaves 4½" Lignacite Blocks with 2" cavity = 51 decibels over 100-3,200 cycles per second.**

DETERMINATIONS

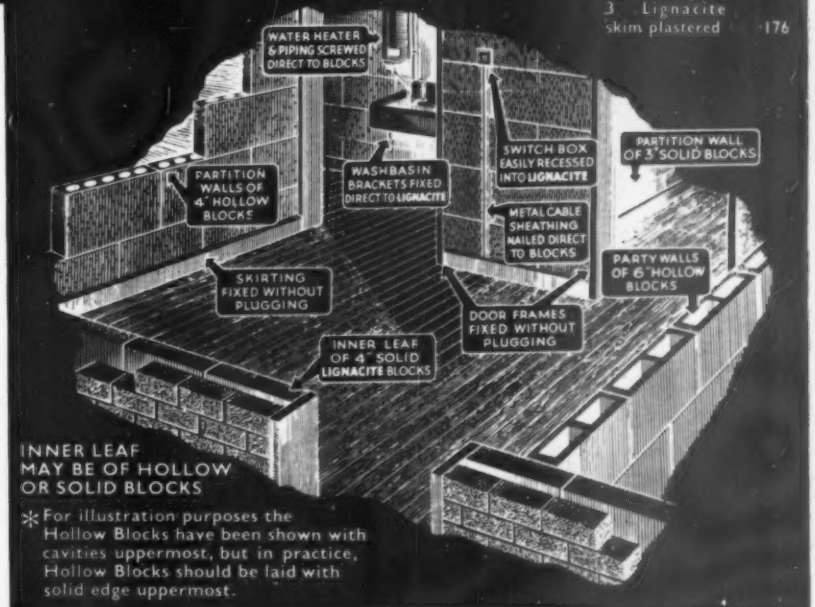
Items 1-7 . . . **Messrs. Ellis Research and Testing Laboratories Ltd.**

Item 8 . . . **Department of Scientific and Industrial Research and Fire Offices' Committee Joint Fire Research Organisation.**

Item 9 . . . **Building Research Station.**

Thickness of Lignacite	"U"
2"	0·51
2½"	0·45
3"	0·41
4"	0·34
4½"	0·33
4½"	0·32
6"	0·26
9"	0·188

Cavity wall of 4½" brick externally, sealed 1" air space, 4½" Lignacite with plaster skim coat internally. "U" = 0·21.



INNER LEAF MAY BE OF HOLLOW OR SOLID BLOCKS

*For illustration purposes the Hollow Blocks have been shown with cavities uppermost, but in practice, Hollow Blocks should be laid with solid edge uppermost.

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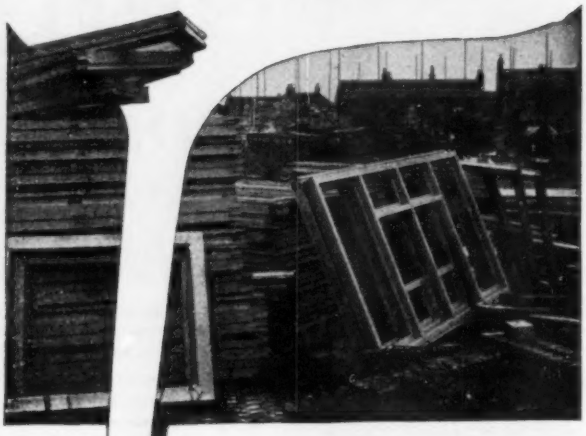
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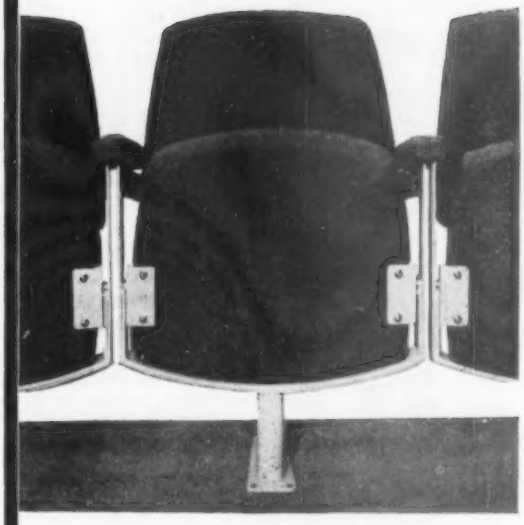
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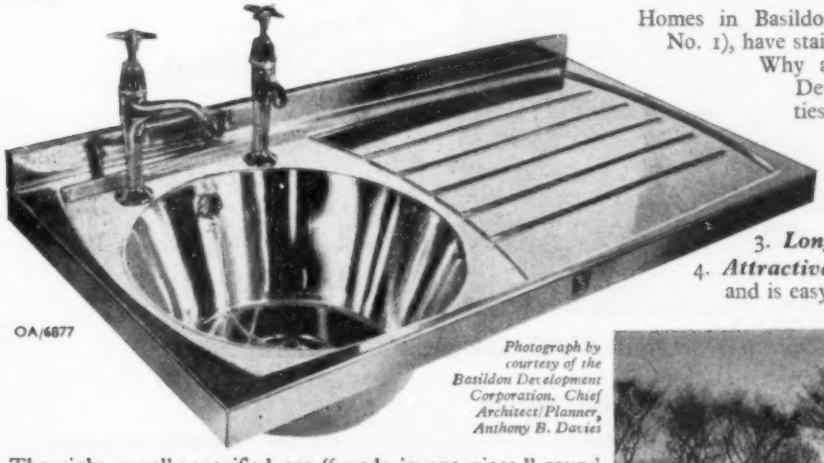
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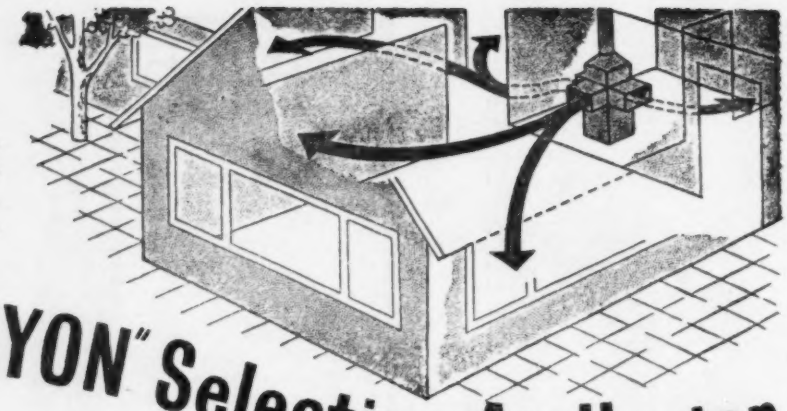
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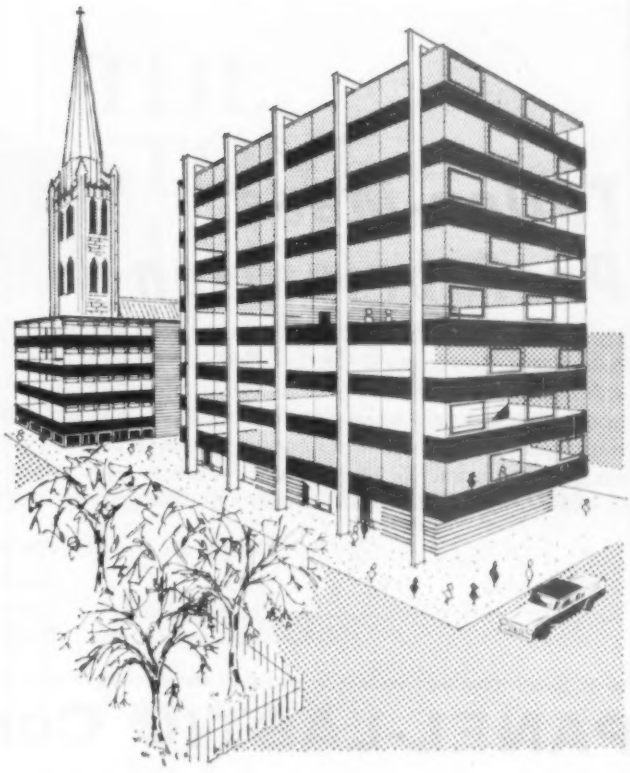
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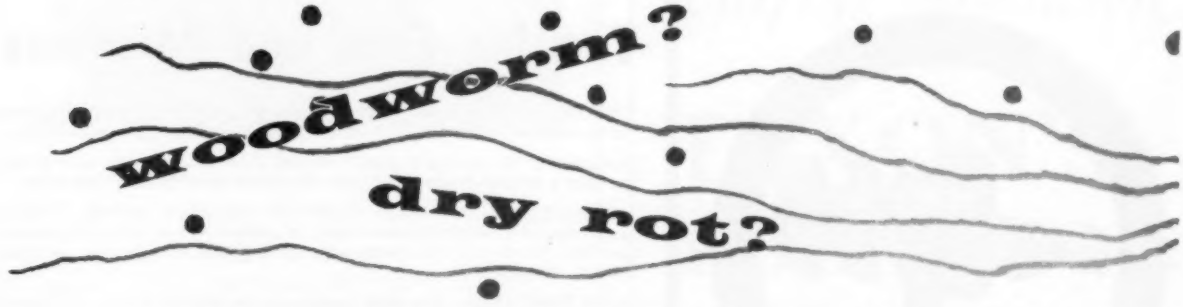
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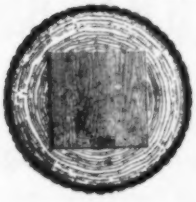
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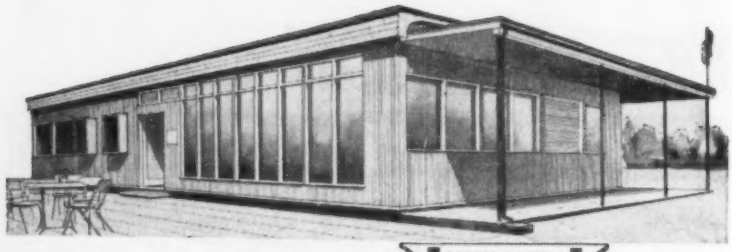
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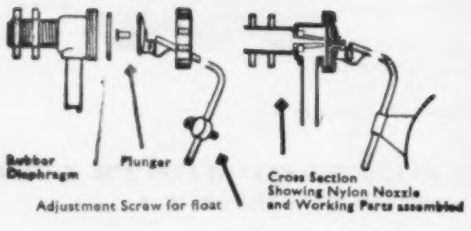
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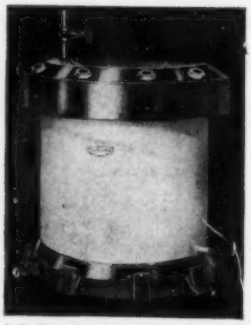
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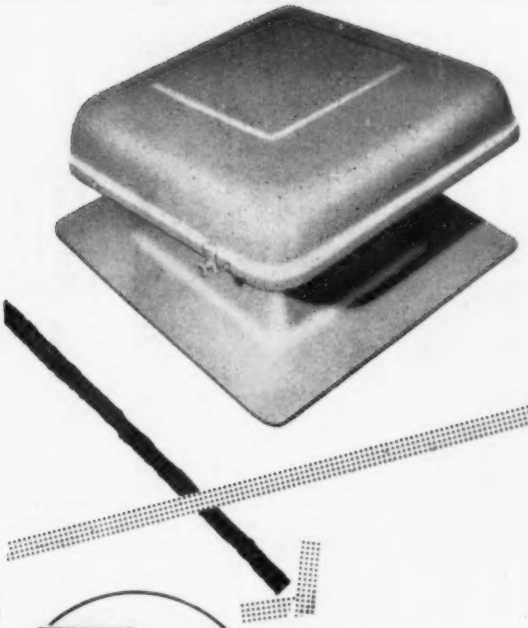
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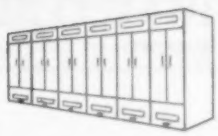
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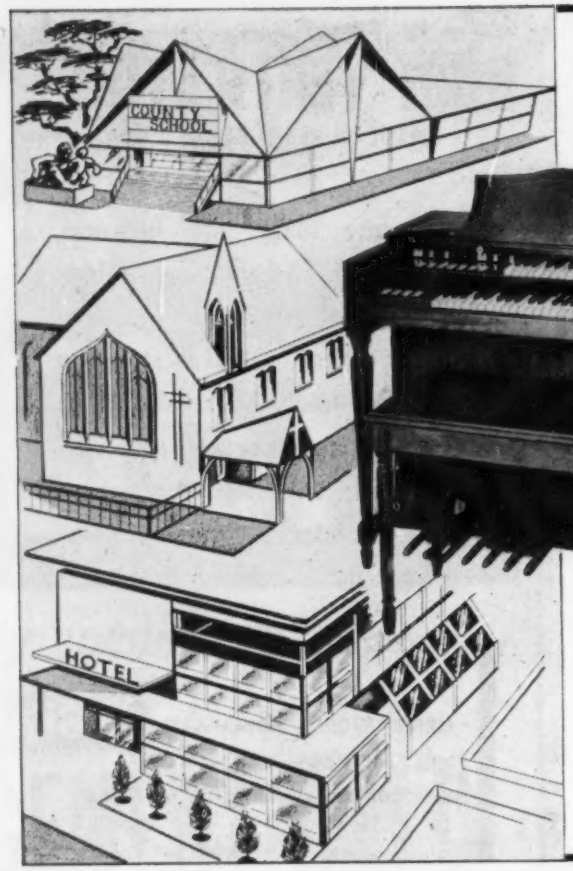
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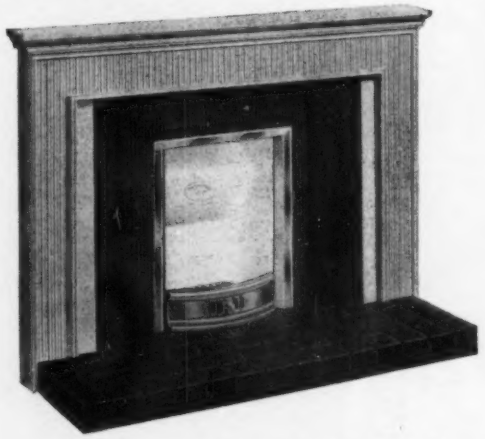
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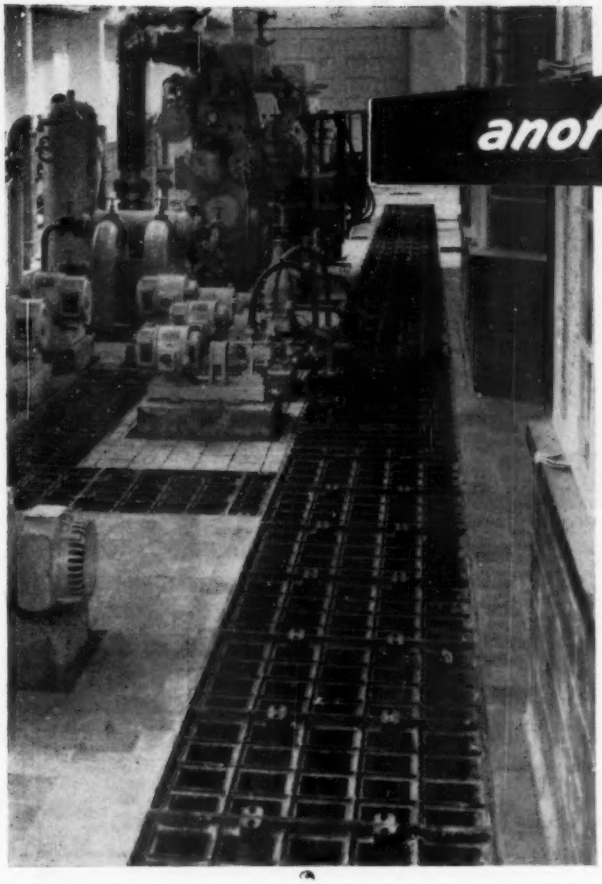
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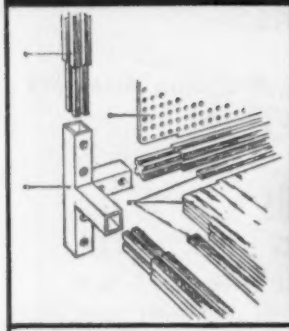
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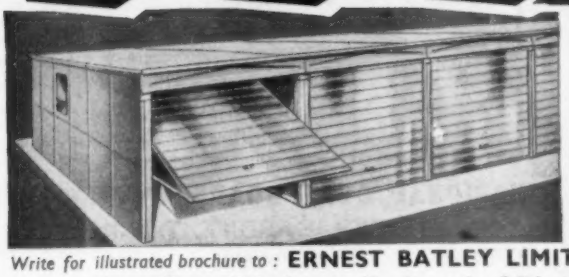
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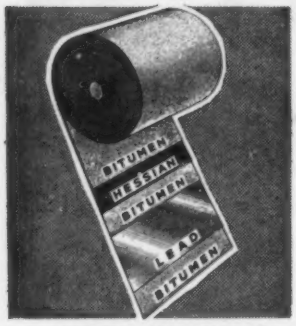
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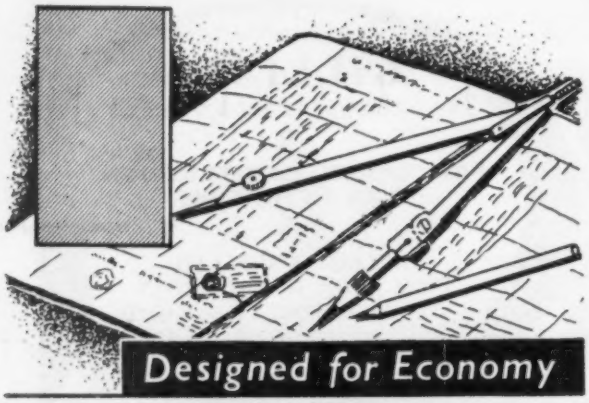
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CANADA

TOWN PLANNERS

Central Mortgage and Housing Corporation (the Government Agency concerned with Housing and Planning in Canada) requires Town Planners with creative and administrative abilities in its expanding activities in Ottawa and across the nation. The work includes physical planning and design of Public Housing and Redevelopment projects; research; town planning for other government agencies; and the review of private housing developments submitted for government financing. Openings are available at Head Office, Regional Offices and Branch Offices. Applicants should possess a professional qualification and membership in T.P.I. or R.I.B.A. Salary in accordance with qualifications and experience. Excellent opportunity for promotion. Applicants and Family Passage Paid. Health, Pension and Life Insurance Benefits. Applications are also invited from Scandinavia, the Low Countries and France. Apply in confidence by June 1st, giving age, marital status, qualifications and experience with names of three references to:

Mr. G. M. Morrison,
National Employment Service of Canada,
61 Green Street, London, W.1.

The Corporation's Chief Architect and Planner, Mr. Ian Maclennan, will interview applicants in London, in early June by appointment.

LAING

LAING DEVELOPMENT COMPANY LIMITED

requires

ARCHITECTS

who are

Skilled in design, for
work involving redevelopment of city centres

also

EXPERIENCED PERSPECTIVE ARTIST

Apply, giving brief details, to Group Personnel Manager (TH.1) John Laing and Son Limited, London, N.W.7

YOUNG ARCHITECTS

There are vacancies for young architects with progressive ideas in the Architect's Department of Richard Costain (Construction) Ltd. This Company is building in many parts of Britain, work in progress including a wide range of commercial, industrial and multi-storey projects.

★ You would be responsible to a Group Leader who personally supervises a small team of architectural staff.

★ You would assist in the design of projects allocated to your Group.

★ You would have the additional interest of working side-by-side with construction colleagues—estimators, engineers, planning staff and contracts managers—throughout all stages of the contract.

★ You would visit sites during construction as an essential part of your work.

★ You would thus receive a thorough grounding in every aspect of design and supervision.

Full details of duties and conditions of employment are available on application. Please telephone the PERSONNEL MANAGER, WATerloo 4977, for an interview appointment (evenings or Saturday mornings if required); or write, giving a brief outline of your training and career, direct to the CHIEF ARCHITECT, H. Stanley Smith, A.R.I.B.A.

can plan for a constructive future at

COSTAIN

Salaries start from £900 to £1300

according to experience and qualifications

RICHARD COSTAIN LTD., 111 WESTMINSTER BRIDGE ROAD, LONDON, S.E.1.

ARCHITECTS

NATIONAL COAL BOARD

There are vacancies for first class Architects and Architectural Assistants in the Durham Division.

The posts offer interesting, worth-while work with opportunities of acquiring wide experience on industrial and welfare buildings and the design of offices, laboratories, etc. Conditions of service are good in new offices occupied only last year.

Excellent Superannuation Scheme with Widow's and Children's Benefits and the possibility, in certain cases, of existing rights being transferred. Five-day week; staff restaurant.

Salaries according to age, experience and qualifications, range from £785 to £1,625.

Please apply, or write for further information, to the

Chief Staff Officer, N.C.B.
Team Valley Trading Estate, Gateshead 11

SENIOR ARCHITECTURAL DRAUGHTSMAN

required by

KODAK LIMITED

for its Project and Design Department. This department is a member of the Engineering Division where over 1,000 people are employed.

The work will cover design and layout of industrial and office buildings and the preparations of working drawings.

Candidates should be qualified up to H.N.C. in Building or equivalent.

The Company offers excellent employee benefits and a career of real potential in a go-ahead industry. Please write for application form to:

Personnel Manager
KODAK LIMITED (FACTORIES)
Wealdstone, Harrow, Middx.

CLASSIFIED ADVERTISEMENTS

Owing to the Whitsun holiday the issue of May 25th will go to press one day earlier than usual. All advertisements for this issue must reach the publishers not later than first post Thursday, May 18th.

Advertisements should be addressed to the Advertisement Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

AIR-MAIL SERVICE available on request.
In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.

Public and Official Announcements

36s. per inch; each additional line 3s.

AYCLIFFE DEVELOPMENT CORPORATION
(NEW TOWN OF NEWTON AYCLIFFE)
ASSISTANT ARCHITECTS
AND
ARCHITECTURAL ASSISTANTS

Applications are invited for the above appointments at salaries within the range of Grades A.P.T. IV and VI of the Whitley Council for New Towns Staff salary scales, i.e. £1,140—£1,565 p.a. The commencing salary and grade will be fixed according to the qualifications and experience of the successful applicant.

The principal work for the successful applicants will be in connection with the development of the Town Centre of the new town.

Appointments subject to N.J.C. Conditions, superannuation, medical examination and to one month's notice, in writing, on either side.

Housing accommodation available, if required.

Applications, stating age, qualifications and experience, together with the names of two referees, to be sent to the undersigned.

A. V. WILLIAMS,
General Manager.

Churchill House,
Newton Aycliffe,
Nr. Darlington. TC6672

CITY AND COUNTY OF NEWCASTLE UPON TYNE
CITY ARCHITECT'S DEPARTMENT

A unique opportunity exists in this office for competent Architects to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:—

J.N.C. "C": £1,560—£1,825 per annum.
J.N.C. "B": £1,410—£1,670 per annum.
A.P.T. V: £1,310—£1,480 per annum.
A.P.T. IV: £1,140—£1,310 per annum.
A.P.T. III: £960—£1,140 per annum.
A.P.T. II: £815—£960 per annum.
A.P.T. I: £645—£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood Road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Markets; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architects wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1
20th February, 1961. TC6084

ADMINISTRATIVE COUNTY OF LEICESTER

(*a*) PRINCIPAL ASSISTANT ARCHITECT, £1,410—£1,565.
(*b*) CHIEF ASSISTANT ARCHITECTS, £1,310—£1,480.
(*c*) SENIOR ASSISTANT ARCHITECTS, £1,140—£1,310.
(*d*) ARCHITECTURAL ASSISTANT, £815—£1,140 (according to qualifications).

Candidates for (*a*) must be members of the R.I.B.A., have had sound experience and be capable of acting as Group Leaders on an extensive programme of education buildings. Candidates for (*b*) must be members of the R.I.B.A., have had considerable office experience and be Capable of taking charge of contracts from inception to completion. For (*c*), should be members of the R.I.B.A., have had office experience and be capable of taking charge of small contracts. For (*d*), should have Intermediate or Final qualifications of the R.I.B.A. and be capable of executing working drawings. Lodging allowance and removal expenses may be paid to a married man. Apply on form obtainable from County Architect, 123 London Road, Leicester. 7039

COUNTY BOROUGH OF WIGAN
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the appointment of PRINCIPAL ARCHITECTURAL ASSISTANTS, on the established staff of the Borough Engineer and Surveyor, at a salary in accordance with Grade A.P.T. IV/V (£1,140—£1,480).

There is an interesting and varied programme of work in the Department.

Housing accommodation can be offered for the successful married applicants.

The point of entry to the salary Grade will be determined by qualifications and experience.

Applications, giving name, address, age, present appointment and salary, previous appointments, and also the names of two persons to whom reference may be made, should be sent to the Borough Engineer and Surveyor, Municipal Buildings, Wigan, to be received by him by no later than 15th May, 1961.

ALLAN ROYLE,
Town Clerk.

Municipal Buildings,
Wigan. 7186

WARWICKSHIRE COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS

Recently qualified Architects are required for appointment on Grade A.P.T. III-IV (£960—£1,310). The persons appointed will work in groups on large projects and an opportunity will be given to men with enthusiasm and ability to design and carry out projects under a group architect.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Application forms and full conditions applicable to the appointment can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
April, 1961. 7199

GLOUCESTERSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECTS—"CAREER CLASS," commencing in A.P.T. IV (£1,140—£1,310 p.a.) progressing to A.P.T. V (£1,310—£1,480 p.a.) subject to satisfactory report on reaching appropriate incremental point in Grade. Applicants must be Registered Architects and Associate Members of the R.I.B.A.

(*b*) ARCHITECTURAL ASSISTANTS—"QUALIFYING CLASS." Vacancies exist in the following Grades:—
A.P.T. I: Salary £645—£815 p.a.
A.P.T. II: Salary £815—£960 p.a.
A.P.T. III: Salary £960—£1,140 p.a.
A.P.T. IV: Salary £1,140—£1,310 p.a.

Applicants for posts in Grades I and II should have passed the Intermediate Examination of the R.I.B.A., and for Grades III and IV the full R.I.B.A. Final Examination.

N.J.C. Conditions of Service; superannuation; medical examination.

Applications, stating age, present position and salary, details of previous appointments, together with the names and addresses of two persons for reference, must reach the County Architect, Shire Hall, Gloucester, by 13th May, 1961.

GUY H. DAVIS,
Clerk of the County Council. 7192

BOROUGH OF HORNSEY
APPOINTMENT OF ARCHITECTURAL ASSISTANT
GRADE A.P.T. I/II

Applications are invited for the above appointment in the Architects' Section of the Borough Engineer & Surveyor's Department. Salary according to experience within Grades A.P.T. I/II (£645 to £960 plus London weighting).

Details and application form from the Borough Engineer & Surveyor, Town Hall, The Broadway, Crouch End, London, N.8, to be returned by Wednesday, the 17th May, 1961. 7201

KINGSTON UPON HULL EDUCATION COMMITTEE

Appointment of Resident Engineer for the erection of the David Lister High School, Kingston upon Hull

Applications are invited from suitably qualified men for the post of RESIDENT ENGINEER for the erection of the David Lister High School, Kingston upon Hull. This new comprehensive school, which will provide accommodation for 1,440 pupils and is estimated to cost about £517,000, is being designed by Messrs. Lyons, Israel and Ellis, Chartered Architects of London, with Messrs. F. J. Samuely & Partners, of London, as Consulting Engineers. The commencing salary will be at the rate of £1,100 per annum and a site allowance of £150 per annum for a single man or of £200—£250 per annum to a married man depending on the particular circumstances, will be payable to a successful candidate living away from home. The appointment is for a period of about two and a half years commencing in about July, 1961.

Application form and further particulars may be obtained from the undersigned to whom completed forms should be returned not later than the 20th May, 1961.

S. W. HOBSON,
Chief Education Officer.

Guildhall,
Kingston upon Hull,
Yorkshire. 7097

ROYAL BURGH OF DUMFRIES
DEPUTE BURGH ARCHITECT

Applications are invited from qualified Architects, preferably with experience in Redevelopment Work.

The appointment, within the Salary Scale £1,280–£1,430 (by three increments of £50), will be subject to the Town Council's Superannuation Scheme and N.J.I.C. Conditions of Service, and the successful applicant will require to pass a medical examination.

If required, the tenancy of a Council house will be given to the successful applicant.

Applications, stating age, qualifications and experience, and the names of two referees, should be lodged with the undersigned not later than 12th May, 1961.

GEORGE D. GRANT,
Town Clerk.

Municipal Chambers,
Dumfries.
15th April, 1961. 7086

WYCOMBE RURAL DISTRICT COUNCIL
APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the appointment of an Architectural Draughtsman in the Engineer and Surveyor's Department at a salary in accordance with Miscellaneous Grades V and VI (£685—£825 per annum).

The appointment is temporary but it is anticipated that the current programme of work will provide employment for at least three years.

The successful applicant will be engaged principally on work connected with housing schemes for aged persons with opportunities for survey work and a variety of general duties.

Applicants should be neat and accurate draughtsmen with experience in the preparation of working drawings and detailing from sketches and must have a good knowledge of building construction.

The Council will be prepared to assist with housing accommodation if required.

Applications endorsed "Architectural Draughtsman," should be addressed to K. E. M. Daniels, A.M.I.C.E., M.I.Mun.E., A.R.I.C.S., Engineer and Surveyor, 8/9, Easton Street, High Wycombe, and should reach him not later than 24th May, 1961.

L. C. RYSDALE,
Clerk of the Council.

17, High Street,
High Wycombe. 7187

BOROUGH OF ILFORD
BOROUGH ENGINEER'S DEPARTMENT
APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN
GRADE MISC. IV (MALE OR FEMALE)

Applications are invited for this appointment. Salary £625—£685 (plus London weighting, depending on age, and amounting to £40 p.a. if 26 or over). Commencing salary according to qualifications and experience. Maximum paid to suitable applicant. Five-day week. Candidates should be competent draughtsmen and be capable of preparing working drawings under supervision. Appointment permanent, superannuable and subject to medical examination.

Form of application obtainable from Borough Engineer, Town Hall, Ilford. Closing date 15th May, 1961. 7200

LANCASHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS. A.P.T. V (£1,310—£1,480). (Starting salary according to experience.)

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructural methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 12th May. 7109

BOROUGH OF ENFIELD
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the following permanent appointments (five-day week):—
ENGINEERING ASSISTANT—A.P.T. I.
ENGINEERING ASSISTANT—A.P.T. II/III.
ARCHTECTURAL ASSISTANTS—A.P.T. III. and A.P.T. IV.
SENIOR PLANNING ASSISTANT—A.P.T. III.

Details of appointments and application forms obtainable from the Borough Engineer & Surveyor, 7, Little Park Gardens, Enfield.

CYRIL E. C. B. PLATTEN,
Town Clerk.

Civic Centre,
Enfield. S7124

CITY OF SHEFFIELD
CITY ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited from suitably qualified persons for the following appointments on the staff of the City Engineer and Surveyor and Town Planning Officer (Mr. C. R. Warman, B.Sc., M.I.C.E., M.I.Mun.E., M.T.P.I.).

(*a*) AREA PLANNING OFFICER—Grade B (£1,480—£1,670 p.a.).
(*b*) CHIEF ASSISTANT (Special Works)—Grade B (£1,480—£1,670 p.a.). The person appointed to this post will be required to take charge of the Special Works Section which deals with redevelopment units, landscaping, wayside gardens and features, and generally assist all other Sections of the City Engineer's Department where matters of design in association with amenity are involved.
(*c*) SENIOR PLANNING ASSISTANT—Grade A.P.T. IV (£1,140—£1,310 p.a.).

Candidates for posts (*a*) and (*b*) should have a Town Planning qualification and an architectural or other suitable additional qualification would be an advantage.

The commencing salary for each of the above posts will be in accordance with experience and qualifications.

Consideration will be given if required to assistance with housing accommodation and removal expenses in suitable cases.

Superannuable posts, N.J.C. Conditions of Service, Medical Examination.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries) and quoting the names of two referees, should be submitted to the undersigned by the 15th May next.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1. 7158

LANCASHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT ARCHITECTS, A.P.T. IV (£1,140—£1,310). (Starting salary according to experience.)

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructural methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 12th May. 7108

COUNTY BOROUGH OF SOUTHEND-ON-SEA
BOROUGH ARCHITECT'S DEPARTMENT
APPOINTMENT OF CHIEF ASSISTANT ARCHITECT

Applications are invited for the above appointment, salary Lettered Scale C, £1,560—£1,825 per annum. There is a car mileage allowance.

Applicants should have had a wide experience in an office known for its enthusiasm for modern practice and be able to demonstrate ability to work with senior staff engaged on major projects including a new civic centre.

The appointment will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council's Scheme of Conditions of Service so far as adopted by the Council. Medical examination.

Housing accommodation will be available and removal expenses paid to the successful candidate.

Applications, giving full details, to be sent to the Borough Architect not later than Monday, 22nd May, 1961.

Canvassing will disqualify. Any candidate who is related to member or officer of the Council is required to disclose the fact.

ARCHIBALD GLEN,
Town Clerk.
7155

ARCHITECT
NATIONAL COAL BOARD

There is a vacancy in the Divisional Architect's Office, National Coal Board, Northern (N & C) Division, Whitley Road, Longbenton, Newcastle-upon-Tyne, 12, for a young architect, qualified A.R.I.B.A. or at final examination standard. Salary within scale £900 × £35 — £1,250 per annum if qualified or £785 × £30 — £935 (exceptionally up to £1,100) if not yet qualified.

Applications giving date of birth and full details of education, qualifications and experience to Staff Department at the above address by: 16th May, 1961. Please quote: A/3. 7348

BOROUGH OF RAWTENSTALL
APPOINTMENT OF CHIEF ARCHITECT

Applications are invited for the above permanent appointment at a salary within A.P.T. IV (£1,140—£1,310 per annum). Applicants should be members of the R.I.B.A.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, the National Scheme of Conditions of Service and the termination by one month's notice by either side. Housing accommodation will be available.

Applications, including names and addresses of two referees, should reach the undersigned not later than Friday, the 12th May, 1961. Canvassing will disqualify. Any relationship to members of senior officers of the Council must be disclosed.

COLIN CAMPBELL,
Town Clerk.

Town Hall,
Rawtenstall,
Rossendale,
Lancs. 7141

BOROUGH OF RAWTENSTALL
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment on the permanent staff at a salary within A.P.T. III (£960—£1,140 per annum).

The appointment will be subject to the provisions of the Local Government Superannuation Act, the National Scheme of Conditions of Service and the termination by one month's notice by either side. Housing accommodation will be available.

Applications, including names and addresses of two referees, should reach the undersigned not later than Friday, the 12th May, 1961. Canvassing will disqualify. Any relationship to members or senior officers of the Council must be disclosed.

COLIN CAMPBELL,
Town Clerk.

Town Hall,
Rawtenstall,
Rossendale,
Lancs. 7140

COUNTY BOROUGH OF PRESTON
APPOINTMENT OF CLERK OF WORKS

Applications are invited for the post of Clerk of Works for the Harris College of Further Education adaptations at a salary of £1,040 p.a. The appointment will be for the duration of the work, which is due to be completed in June, 1963.

Applicants should have had considerable experience in shoring and underpinning of existing buildings during structural alterations.

Applications stating age, present position and salary, previous positions and details of qualifications and experience, together with the names and addresses of two referees, to be received by me not later than Friday, the 12th May, 1961.

W. E. E. LOCKLEY,
Town Clerk.
7283

CITY OF SHEFFIELD
ESTATES SURVEYOR'S DEPARTMENT

Applications are invited from:—
1. Surveyors with experience.
2. Newly-qualified Surveyors
3. Students who expect to qualify this year.
4. Young men who wish to train as Surveyors.

The Department, under the direction of Mr. W. H. Rothwell, B.Sc., F.R.I.C.S., offers a particularly wide field of experience including valuation and acquisition of properties for Housing and Education, Central Redevelopment and road improvement purposes, disposals of land and buildings by short and long leases; improvement, repair and demolition of properties acquired by the Local Authority for its various statutory purposes, rating valuation, agricultural estate management and advice on questions of stability arising out of underground mineral working.

Salaries for trainees range from £355 per annum at age 17 to £555 per annum at 21. Financial assistance is provided for tuition and examination fees. Salaries for qualified surveyors range from £960 per annum on qualification to £1,310 per annum according to experience, with good prospects of promotion to senior grades.

Apply in writing to the Town Clerk, Town Hall, Sheffield, 1. S7284

NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD

QUANTITY SURVEYING ASSISTANT required (Ref. 921) for working up bills of quantities and final accounts, measuring on site and taking off for small works.

Also BUILDING SURVEYING ASSISTANT (Ref. 922) for assisting in surveys of hospital sites and preparation of working drawings and specifications under supervision for works of a minor character.

Applicants should have passed the Intermediate Examination of the R.I.C.S. in the appropriate sub-division.

Salary scale £645—£940.

Commencing salary above minimum subject to certain conditions.

Posts are permanent and superannuable, five-day week. There is a scheme of financial assistance to students preparing for professional examinations.

Apply, stating age, qualifications (with dates) and experience, with names of two referees to Secretary, North West Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, W.2, quoting appropriate reference number by 11th May. 7217

HORSHAM URBAN DISTRICT COUNCIL

Applications are invited for the permanent appointment of CHIEF ARCHITECTURAL ASSISTANT in the Engineer and Surveyor's Department at a salary within Grade A.P.T. III/IV (£960—£1,310).

Applicants should hold a final professional qualification and have good general experience, the qualifications and experience of the successful candidate determining the point of entry in the salary scale.

The appointment offers experience in a rapidly developing Urban District with an extensive and varied building programme involving individual treatment for each site and including flats, aged persons accommodation and houses for sale and letting.

The provision of housing accommodation for married applicants will be considered if required.

Fully detailed applications giving the names and addresses of two referees must be received by the undersigned not later than 15th May, 1961.

S. ASHTON STRAY,
Clerk of the Council.
S7287

CITY OF SHEFFIELD EDUCATION COMMITTEE
COLLEGE OF TECHNOLOGY
DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

Applications are invited for the following additional posts which result from the continued development of work, particularly at advanced levels:—

(1) SENIOR LECTURER IN GENERAL BUILDING AND CIVIL ENGINEERING.

Candidates should possess suitable professional qualifications and have had good industrial and teaching experience. The person appointed will be responsible for the organisation and administration of all National Certificate courses in the Department, and will be expected to offer suitable subjects at advanced level.

(2) SENIOR LECTURER IN SURVEYING.

Candidates should possess suitable professional qualifications in Surveying (*e.g.* membership of R.I.C.S. and/or a degree in Estate Management) and should be capable of teaching Surveying subjects up to final R.I.C.S. examination level. The ability to teach Town and Country Planning and Valuations would be an advantage. Duties will include the administration of existing part-time day courses in Surveying and the development of new associated courses.

(3) LECTURER IN CIVIL ENGINEERING AND BUILDING SCIENCE.

Candidates should hold Graduate or equivalent qualifications, and have had suitable industrial or teaching experience. The person appointed will be expected to teach two or more of the subjects: Building Science, Heat, Light and Sound, Principles of Electricity, Hydraulics and Mathematics, in sandwich courses leading to the A.M.I.C.E. and the H.N.D. in Building.

(4) ASSISTANT (GRADE B) to teach Carpentry and Joinery subjects in Craft Certificate and Advanced Craft Certificate courses. Ability to teach Vehicle Building course subjects or Woodcutting Machinists Work will be an advantage.

(5) ASSISTANT (GRADE B) to teach Welding and Hard Metalwork in Heating and Ventilating Engineering and plumbing courses to C.G.L.I. examination standards.

(6) ASSISTANT (GRADE A) to teach Plumbing subjects in Craft Certificate and Final Craft Certificate courses.

Candidates for posts (4), (5) and (6) should have adequate and suitable industrial experience together with teacher training or teaching experience.

Salary Scales:—
Senior Lecturers: £1,550 × £50—£1,750 per annum.
Lecturers: £1,370 × £35—£1,550 per annum;
Assistants (Grade B): £700 × £27 10s.—£1,150 per annum.
Assistants (Grade A): £520 × £27 10s.—£1,000 per annum.
For Assistants there are allowances for approved qualifications, war service, training and industrial experience

Application forms obtainable from the undersigned (s.a.e.) at P.O. Box 67, Sheffield, 1, should be returned within 14 days of the appearance of this advertisement.

T. H. TUNN,
Director of Education.
7220

METROPOLITAN BOROUGH OF ISLINGTON
APPOINTMENT OF ARCHITECTURAL STAFF

Applications are invited for the following appointments on the permanent staff:—
(*a*) Two SENIOR ARCHITECTURAL ASSISTANTS (Grade A.P.T. V, £1,310—£1,480 p.a.). Plus appropriate London weighting.
(*b*) Two ARCHITECTURAL ASSISTANTS (Grade A.P.T. III, £960—£1,140 p.a.). Plus appropriate London weighting.

Applicants (not more than 50 years of age) for
(*a*) should be Associate Members of the R.I.B.A. with wide experience including multi-storey housing;
(*b*) should have passed the Intermediate examination of the R.I.B.A. and be suitably experienced.

Application forms, returnable by first post on Tuesday, 16th May, obtainable from Borough Engineer and Surveyor, Town Hall, Upper Street, N.1.

H. DIXON CLARK,
Town Clerk.
7230

BOROUGH OF FLINT
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments:

1. ENGINEERING ASSISTANT.
Salary A.P.T. Grade III (£960—£1,140 per annum). Applicants must have good general municipal engineering experience and preference will be given to holders of an appropriate qualification.

2. ARCHITECTURAL ASSISTANT.
Salary A.P.T. II (£815—£960 per annum). Applicants should have a good experience in Architectural design and construction.

The appointments are subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, passing of a medical examination and are determinable by one month's notice.

A five-day week is in operation and the Council will provide housing accommodation if required.

The Borough of Flint is close to the North Wales seaside resorts and the Council are undertaking an extensive programme of Capital works in respect of central area redevelopment, housing, sewerage, road improvements, Council Offices and Civic Hall.

Applications stating age, training, qualifications, details of present and previous appointments, experience and salary, together with copies of two recent testimonials, should reach the undersigned not later than Tuesday, 23rd May, 1961.

Canvassing in any form will disqualify.

WILLIAM McINTYRE,
Town Clerk.

Town Hall,
Flint.
24th April, 1961. 7273

CHISLEHURST AND SIDCUP URBAN DISTRICT COUNCIL
ASSISTANT ARCHITECT

QUALIFIED ASSISTANT ARCHITECT required in Architects' Section of Engineer & Surveyor's Department.

Salary range £960—£1,310 plus London weighting.

Applicants must have Final Examination of R.I.B.A.

Commencing salary for an Architect with five years' experience, including training, will be not less than minimum of Grade A.P.T. IV (£1,140 plus London weighting).

Housing accommodation available.

Applications giving age, experience and two referees, to the Clerk, Council Offices, Sidcup Place, Sidcup, Kent, by Friday, 19th May, 1961. 7311

NEWCASTLE REGIONAL HOSPITAL BOARD
EXPANSION OF ARCHITECTURAL DEPARTMENT
P. H. KNIGHTON, M.B.E., A.R.I.B.A.,
REGIONAL ARCHITECT
ARCHITECTURAL STAFF

The Board is at present preparing a 10-years programme containing a large number and variety of major hospital projects. Planning and building is already current on schemes costing about £15,000,000. As the programme includes also a wide range of buildings which are not peculiar to hospitals, good general experience as well as specialist experience may be gained.

Applications are invited for the following (superannuable) posts:—

1. SENIOR ASSISTANT ARCHITECT (£1,300 × £60 (5)—£1,600).
Open to registered architects with experience in the design and construction of major public buildings. Experience of hospital work desirable but not essential. Assistance with removal expenses if appointee at present in a lower-graded Health Service post.

2. ASSISTANT ARCHITECT (£905 × £35 (1) × £45 (6) × £50 (2)—£1,310).
Applicants must have passed the R.I.B.A. Final Examination. For registered architects increments can be given above the bottom of the grade in accordance with relevant practical experience.
Qualified but unregistered architects can enter the Architectural Assistant scale at a salary point of £865 per annum with a view to entering the Assistant Architect grade when registered.

3. ARCHITECTURAL ASSISTANTS (£625 × £30 (8) × £35 (1)—£900).
Intermediate R.I.B.A. and preferably some practical experience.

4. ARCHITECTURAL DRAUGHTSMEN (£475 × £25 (6) × £30 (2)—£685).
Three years' previous experience in an architect's drawing office and good draughtsmanship required.

Evening study facilities available at King's College of Durham University in Newcastle.

Details of training, qualifications, experience, present salary etc., with the names of three referees should reach the Secretary to the Board, Benfield Road, Newcastle upon Tyne 6, not later than 18th May, 1961. Canvassing will disqualify. S7313

WORCESTERSHIRE COUNTY COUNCIL
ASSISTANT PLANNING OFFICERS
SCALE "A" (£1,365—£1,565)

Two experienced and qualified Planning Officers are required to take charge of schemes for the redevelopment of shopping centres and for town development in connection with Birmingham Overspill.

Forms of application to be obtained from the County Planning Officer, County Buildings, Worcester, and to be returned to him not later than Thursday, 25th May, 1961. (M.92.) S7289

COUNTY OF ESSEX
EDUCATION COMMITTEE
SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART
Forest Road, Walthamstow, E.17

Applications are invited for the following post in the Architecture and Building Department:—

ASSISTANT LECTURER, Grade B in Architecture, to teach Second and Third Year full-time and part-time day students in the School of Architecture, which is acknowledged by the Board of Architectural Education of the R.I.B.A.

Salary within scale £700 × £27 10s. (15) × £37 10s. (1) to £1,150 per annum, plus additions for approved training and graduate qualifications if in accordance with the Burnham Further Education Report. London Allowance (additional to scale salary) £38 or £51 per annum. Increments above the scale minimum will be allowed for war/national service and previous relevant experience.

Apply by letter (no forms) to the Principal, giving details of training qualifications and experience, together with three recent testimonials or the names and addresses of three referees. 7312

BOROUGH OF HARROW

Applications are invited for the following appointments in the Borough Engineer's Department:—

PLANNING ASSISTANTS, A.P.T. Grade II (£815 to £960 p.a. plus London weighting). The commencing salary will be in accordance with qualifications and experience.

A contribution towards removal expenses will be considered.

The appointments are subject to the Local Government Superannuation Acts; and to the National Joint Council Scheme of Conditions of Service.

Forms of application may be obtained from me and must be returned not later than Friday, 19th May, 1961.

DAVID PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
Harrow, Middlesex. 7314

CITY OF PORTSMOUTH
CITY DEVELOPMENT DEPARTMENT

Applications are invited from candidates with Intermediate A.M.T.P.I. or equivalent for appointment of Development Assistant A.P.T. Grade III (£960—£1,140), commencing salary according to experience.

Applicants should have a comprehensive knowledge of Town Planning and experience in Decant.

Consideration will be given to the provision of housing accommodation for successful applicant.

Application forms obtainable from City Development Officer, 1 Western Parade, Portsmouth, to be returned by 29th May, 1961. S7323

KUMASI COLLEGE OF TECHNOLOGY
SCHOOL OF ARCHITECTURE, TOWN PLANNING AND BUILDING

Applications are invited for appointment to four positions at Lecturer level in the Building Research Group of the above school:

(i) ARCHITECT.
(ii) ARCHITECT-PLANNER or ECONOMIST-PLANNER or ENGINEER-PLANNER.
(iii) ECONOMIST or SOCIOLOGIST or ANTHROPOLOGIST.
(iv) GEOGRAPHER-PLANNER or ECONOMIC GEOGRAPHER.

QUALIFICATIONS:

Applicants should have a good University degree and/or membership of appropriate professional institutions or equivalent qualifications. A minimum of three years' experience is desirable, but the most important requirement is the ability to collect, correlate and analyse research material obtained in the field, the laboratory and the library, and to follow this up with positive development proposals.

The Building Research Group at Kumasi College of Technology is undertaking research into a wide group of building and planning subjects in Ghana. Subjects currently being studied include durability of building materials, new forms of village housing, local and regional planning, economic and sociological factors in building and planning, building design for air conditioning, indoor climate in buildings, etc. The Group also runs a comprehensive Materials Gallery and Information Bureau.

The contract salary scale is £1,202 10s. × £65—£2,112 10s.

Pensionable terms are open to Ghanaian applicants.

In addition, children's allowances are paid up to a maximum of three, and a gratuity at the end of the contract at the rate of £150 for each year of satisfactory service. The entry point is fixed according to qualifications and experience. This salary scale is, however, under review.

The College is fully residential and members of staff are housed in pleasant modern bungalows on the spacious campus; climate and living conditions are good.

Annual leave with three free return passages in four years is granted to members of staff and their families.

Application forms and full information about the Research Group may be obtained from the Assistant Registrar, Kumasi College of Technology, 29, Tavistock Square, London, W.C.1, who will also be glad to answer any questions. 7236

SCHOOL OF ARCHITECTURE, TOWN PLANNING AND BUILDING
KUMASI COLLEGE OF TECHNOLOGY, GHANA

Applications are invited for the following posts:
(1) LECTURER/STUDIO MASTER IN ARCHITECTURE.
(2) LECTURER IN BUILDING SCIENCE.
(3) LECTURER / STUDIO MASTER IN GENERAL BUILDING SUBJECTS.

Applicants for post (1) should be Associate Members of the R.I.B.A. or hold an equivalent qualification, preferably with professional experience in the humid tropics. For posts (2) and (3), applicants should have a good honours degree in Building Technology or be Associates of the Institute of Building or hold an equivalent qualification. All applicants must have at least three years professional experience.

At present, the College prepares students for the R.I.B.A. and I.O.B. examinations.

A Building Research Group has been formed within the School and offers members of staff excellent opportunities for individual or group research into local problems.

The Ghana Government intends to establish Kumasi College of Technology as an autonomous University in the very near future, and the structure of the syllabus and the salary scales are at present under review.

Contract appointments are normally for five years and may be renewed. Three months' notice of resignation of an appointment is required on either side.

CONTRACT SALARY SCALE:
£1,202 10s. × £65 to £2,112 10s.

Children's allowances are paid up to three children and a gratuity is paid at the end of the contract at the rate of £12 10s. for every month of satisfactory service. The entry point is fixed according to qualifications and experience.

The College is fully residential and members of staff are housed in pleasant modern bungalows on the spacious campus; climate and living conditions are good.

Annual leave with three free return passages in four years is granted to members of staff and their families.

Application forms and an Information Brochure may be obtained from the Assistant Registrar, Kumasi College of Technology, 29, Tavistock Square, London, W.C.1, who will also be glad to answer any questions about the appointments. 7237

COUNTY BOROUGH OF DUDLEY
ASSISTANT ARCHITECTS, A.P.T. GRADE V

Vacancies exist for the above permanent appointments in the Borough Architect's Department.

Applicants should be A.R.I.B.A.

Applications, giving the names and addresses of two Referees, to reach me on or before Tuesday, 9th May, 1961.

P. D. WADSWORTH,
Town Clerk.

The Council House,
Dudley,
Worcs.
21st April, 1961. 7238

COUNTY BOROUGH OF HUDDERSFIELD
BOROUGH ARCHITECT AND PLANNING OFFICER'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECT, Grade A.P. & T. V (£1,310—£1,480).
(*b*) ASSISTANT ARCHITECT, Grade A.P. & T. III-IV (£960—£1,310).
(*c*) ASSISTANT QUANTITY SURVEYOR, Grade A.P. & T. II (£815—£960).
(*d*) TOWN PLANNING ASSISTANT, Grade A.P. & T. III-IV (£960—£1,310).

Applicants for (*a*) and (*b*) must be Associate Members of the Royal Institute of British Architects.

The Department has in hand a large programme of building including the First Phase of a new Civic Centre, Technical Teachers' Training College, including Hostel, Secondary Modern and Primary Schools, Homes for Aged Persons, Abattoir and Cattle Market, etc. The successful applicant for appointment (*a*) will be expected to take charge of some of these projects and appointment (*b*) offers an opportunity for a young and enthusiastic Architect to gain valuable experience.

Applicants for post (*c*) must be capable of working-up and assisting with taking-off and should be studying for the professional examinations of the Royal Institution of Chartered Surveyors and preferably have passed the Intermediate Examination.

Applicants for appointment (*d*) should have had experience in Development Plan work and Development Control procedure and should be Members of the Town Planning Institute.

The posts are subject to the National Scheme of Conditions of Service, as adopted by the Council, and to medical examination.

Housing accommodation will be provided, if required.

Applications, with the names of two referees, should reach S. M. Richmond, F.R.I.B.A., A.M.T.P.I., Borough Architect and Planning Officer, High Street Buildings, Huddersfield, not later than 17th May, 1961.

HARRY BANN,
Town Clerk.

Town Hall,
Huddersfield. 7274

DESIGNING FOR LONDON

Festival Hall Extension, South Bank Development, Crystal Palace Sports Stadium and new houses, flats, maisonettes, schools, town development schemes (including houses and factories), hostels, youth centres, out county housing, club rooms, shops, supply depots, homes for old people, fire stations, drill towers, pumping stations and sewage works, ambulance stations, maternity and child welfare clinics, health hostels, health training centres, children's homes, reception centres, approved schools, road improvements, and associated architectural works.

Adaptations, modernisation, rehabilitation, improvements.

Have you thought of joining the L.C.C?

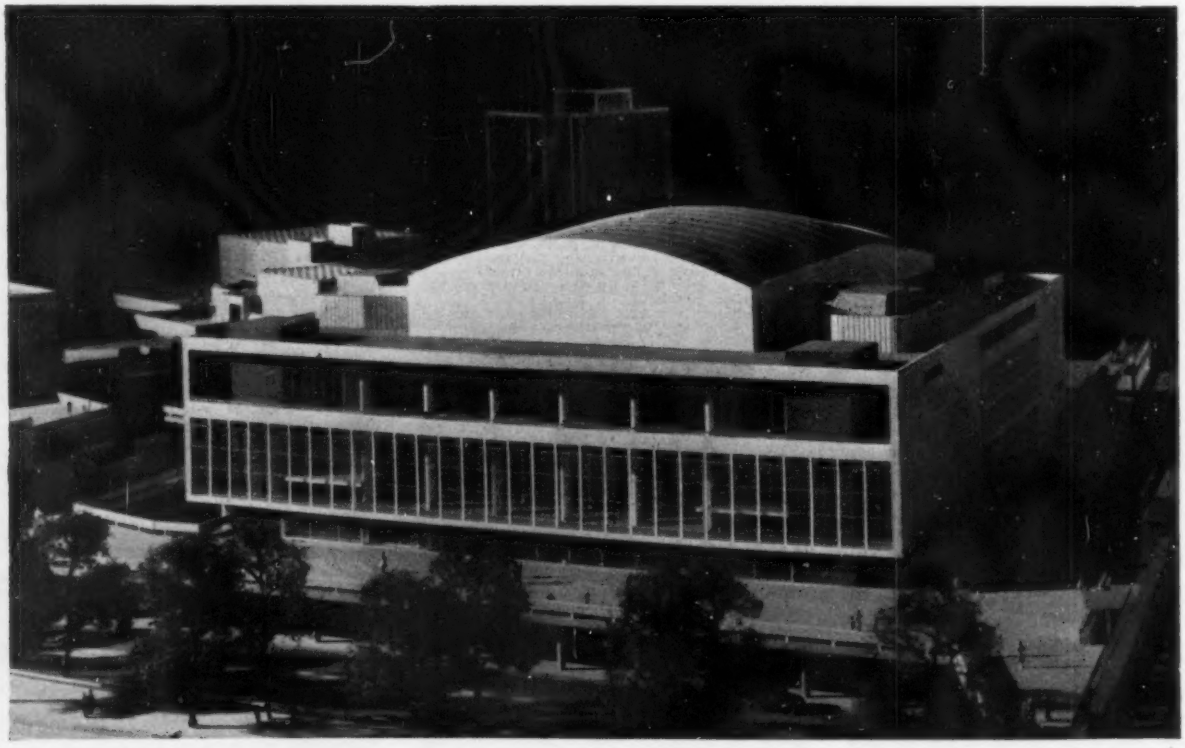
■ Unique opportunity to produce buildings for the public service with the highest possible standards of design. ■ Wide range of buildings enables individuals to be used according to their special abilities. ■ Contact with the latest developments and techniques through central materials and development section. ■ Promotion strictly on merit. ■ Design opportunities in accordance with ability. ■ Flexible salary reviews within grades. ■ Permanency after probationary service. ■ Recognition grants for outstanding work.

Starting salaries for Architects up to £1,500 according to quality and experience.

Whatever changes may result from the Royal Commission Report the enormous programme of work will have to be done and service now with the L.C.C. provides the best training ground for opportunities in the future.

And there is room for a few part-time architects.

Application forms and further particulars from Hubert Bennett, F.R.I.B.A., Architect to the London County Council, County Hall, S.E.1, quoting reference EK/1074/5.



THE UNIVERSITY OF LIVERPOOL

Applications are invited for a RESEARCH FELLOWSHIP IN ARCHITECTURE AND TOWN PLANNING available in the School of Architecture, for post-graduate study (possibly leading to degree of M.Arch.) of wholesale markets, in association with Horticultural Marketing Research Council. Salary not less than £1,500 per annum together with allowances for travel abroad.

Applications, stating age, qualifications and experience, together with the names of three referees, should be received not later than 3rd June, 1961, by the Registrar, from whom further particulars can be obtained. Quoting Ref. CV/AJ. 7275

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE

OFFICE OF THE COUNTY ARCHITECT

Applications are invited for the following appointments. The commencing salary will be fixed at a point within the scale commensurate with qualifications and experience. Five-day week operated.

CENTRAL OFFICE, BISHOPGARTH, WAKEFIELD.

(*a*) SURVEYING ASSISTANT, A.P.T. III. Salary range £960—£1,140.

(*b*) JUNIOR SURVEYING ASSISTANT, A.P.T. II. Salary range £815—£960.

(*c*) JUNIOR SURVEYING ASSISTANT, A.P.T. I. Salary range £645—£815.

Applicants for (*a*) should have extensive experience in surveying, levelling and plotting sites, be neat draughtsmen and capable of taking charge of a survey team. Preference will be given to Associate Members of the Royal Institution of Chartered Surveyors.

Applicants for (*b*) and (*c*) should have had experience in surveying, levelling and plotting sites and should be neat draughtsmen. Experience in surveying of buildings would be an advantage.

HUDDERSFIELD DIVISIONAL OFFICE.

(*d*) JUNIOR ARCHITECTURAL ASSISTANT, A.P.T. II. Salary range £815—£960.

Applicants should possess a sound knowledge of building construction and be capable of dealing with adaptations to buildings of various types and maintenance works.

Applications to be submitted by the first post on Tuesday, 16th May, 1961, on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,
County Architect.

Bishopgarth,
Westfield Road,
Wakefield. 7227

EAST RIDING OF YORKSHIRE COUNTY COUNCIL

Applications are invited for the appointment of a CHIEF QUANTITY SURVEYOR on the staff of the County Architect. The salary will be in accordance with Scale "A" (£1,340—£1,565).

Applicants must be members of the Royal Institution of Chartered Surveyors and have had wide experience in the preparation of estimates, bills of quantities, cost analysis, adjustment of final accounts and other work incidental to such an appointment, including the control of staff.

Applications giving particulars of age, past and present appointments with salaries, details of experience, together with the names of three referees, should be sent to the County Architect, County Hall, Beverley, not later than Friday, 12th May, 1961.

THOMAS STEPHENSON,
Clerk of the County Council. 7228

BOROUGH OF WATFORD

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECT.
Salary within Grade A.P.T. IV.

(*b*) ARCHITECTURAL ASSISTANT.
Salary within Grades A.P.T. II/III.

The assistant appointed to post (*a*) will be a Section Leader and will carry a considerable amount of responsibility.

Commencing salaries will be commensurate with experience and ability and it may be possible to provide housing accommodation if required.

Applications to be sent to the undersigned as soon as possible.

F. C. SAGE,
Borough Engineer, Surveyor & Architect.

Town Hall,
Watford,
Herts. 7232

CITY OF LEICESTER EDUCATION COMMITTEE

LEICESTER COLLEGE OF ART

Principal: E. E. PULLEE, A.R.C.A., F.R.S.A.

Applications are invited from suitable qualified persons for the following posts at the above College, duties to commence on 1st September, 1961:—

1. LECTURER IN THE SCHOOL OF BUILDING. Applicants should be Chartered Surveyors in either the Quantity Surveying or Building sections.

2. LECTURER to be responsible for the promotion of standards in all aspects of design in relation to the work of the School of Building and also to act as liaison consultant with the School of Industrial Design.

Salary in accordance with the Burnham Scale, £1,370—£1,550 p.a.

Further particulars and application forms may be obtained from the Registrar at the College, The Newarke, Leicester. 7233

BOROUGH OF SOUTHGATE

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

ARCHITECTURAL AND ENGINEERING APPOINTMENTS

Applications are invited for the following appointments in the Department of the Borough Engineer and Surveyor:

(*a*) ASSISTANT ARCHITECT, A.P.T. Grade IV, £1,140—£1,310 plus London weighting.

(*b*) ASSISTANT ARCHITECT, A.P.T. Grade III, £960—£1,140 plus London weighting.

(*c*) ENGINEERING ASSISTANT, A.P.T. Grade IV, £1,140—£1,310 plus London weighting.

(*d*) ENGINEERING ASSISTANT, A.P.T. Grade II, £815—£960 plus London weighting.

The above posts are superannuated and established, and the starting salary will be fixed in accordance with qualifications and experience.

Applicants for posts (*a*) and (*b*) should be Associates of the Royal Institute of British Architects, or hold other equivalent qualifications.

Applicants for post (*c*) must be Corporate Members of the Institution of Civil Engineers, or hold the Testamur of the Institution of Municipal Engineers.

Housing accommodation will be available if required.

Forms of application may be obtained from the Borough Engineer and Surveyor, and should be returned to the undersigned not later than 12 noon on Monday, 15th May, 1961.

Canvassing, directly or indirectly, will be a disqualification.

GORDON H. TAYLOR,
Town Clerk.

Town Hall,
Palmers Green,
London, N.13.
April, 1961. 7249

COUNTY BOROUGH OF SUNDERLAND

Applications are invited for the following posts in the Borough Architect's Department:—

(*a*) SENIOR ARCHITECTS, A.P.T. IV/V (£1,140—£1,480).

(*b*) SENIOR ARCHITECTURAL ASSISTANTS, A.P.T. I/II (£645—£960).

(*c*) JUNIOR ARCHITECTURAL ASSISTANTS, General Division (£260—£630).

Commencing salaries in (*a*) and (*b*) according to qualifications and experience, and in (*c*) to age and experience. Application forms obtainable from Borough Architect, Grange House, Stockton Road, Sunderland, which, on completion, must be returned to me not later than 19th May, 1961. Canvassing will disqualify.

G. S. McINTIRE,
Town Clerk. 7231

BOROUGH OF GOSPORT

APPOINTMENT OF ARCHITECTURAL ASSISTANT (TEMPORARY)

Applications are invited for the above appointment in the Architectural Section of the Borough Engineer's Department.

The successful applicant will be required to work on general architectural duties and the salary would be on the A.P.T. II Scale (£815 rising to £960 by four annual increments of £30 and one of £25). The commencing salary will be according to the experience of the applicant.

A Casual User Car Allowance will be paid.

Applications should be addressed to the undersigned and should reach me not later than Monday, 22nd May, 1961, together with the names and addresses of two referees.

EDWARD ADDENBROOKE,
Town Clerk.

Town Hall,
Gosport.
21st April, 1961. 7234

METROPOLITAN POLICE

RECEIVER'S OFFICE

Applications are invited for the following positions in connection with the design and erection of Police Housing, Police Stations, Single Men's Hostels, Cadets' Residential Training Centres and Magistrates' Courts within the Metropolitan Police District and schemes for major alterations to various Police buildings.

ASSISTANT ARCHITECTS

Salary: £991 p.a. at age 25, rising by annual increments to £1,490 p.a. (Maximum salary on entry £1,318 p.a. at age 34 or over.)

Qualifications: Must be registered Architects.

LEADING ARCHITECTURAL ASSISTANTS

Salary: £1,048 p.a. rising by annual increments to £1,220 p.a.

Qualifications: Intermediate R.I.B.A., H.N.C. or equivalent.

ARCHITECTURAL ASSISTANTS

Salary: £658 p.a. at age 21 rising by annual increments to £1,048 p.a. (Maximum salary on entry £960 p.a. at age 28 or over.)

Qualifications: O.N.C. Intermediate R.I.B.A. or equivalent.

TECHNICAL ASSISTANTS III

Salary: £752 p.a. at age 21 rising by annual increments to £1,043 p.a. (Maximum salary on entry £939 p.a. at age 28 or over.)

Qualifications: Intermediate R.I.B.A./R.I.C.S. (Building) or equivalent.

J. INNES ELLIOTT, B.Arch., F.R.I.B.A.,
Chief Architect & Surveyor.

Apply to:
Chief Clerk,
Architect & Surveyor's Department,
New Scotland Yard, S.W.1. S7252

SCHOOL OF ARCHITECTURE, TOWN PLANNING AND BUILDING

KUMASI COLLEGE OF TECHNOLOGY, GHANA

Applications are invited for the following post:

LECTURER IN TOWN PLANNING

Applicants should be Associate Members of the Town Planning Institute, and additional qualifications in Sociology and Geography would be valuable. At the moment, the College prepares students for the examinations of the Town Planning Institute; the Ghana Government intends to establish the College as an autonomous University in the very near future, and the structure of the present syllabus and the salary scale given below are under review.

A Building Research Group has been formed within the School and offers members of staff excellent scope for research into local problems.

Contract appointments are normally for five years and may be renewed. Three months' notice of resignation of an appointment is required on either side.

Contract salary scale: £1,295 × £70—£2,275.

Children's allowances are paid up to two children and a gratuity is paid at the end of the contract at the rate of £12 10s. for every month of satisfactory service. The entry point is fixed according to qualifications and experience.

The College is fully residential and members of staff are housed in pleasant modern bungalows on the spacious campus; climate and living conditions are good.

Annual leave with three free return passages in four years is granted to members of staff and their families.

Application forms and an Information Brochure may be obtained from the Assistant Registrar, Kumasi College of Technology, 29, Tavistock Square, London, W.C.1, who will also be glad to answer any questions about this appointment. 7235

METROPOLITAN BOROUGH OF ISLINGTON

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited from persons not more than 50 years of age for the following appointments on the permanent staff.

(*a*) One TECHNICAL ASSISTANT, A.P.T. III (£960—£1,140) plus London weighting.

(*b*) One SURVEYING ASSISTANT, A.P.T. III (£960—£1,140) plus London weighting.

Applicants for:—

(*a*) and (*b*) should have the Intermediate examination of the Municipal Engineers or Chartered Surveyors or other appropriate qualifications, and preference will be given to applicants with a sound knowledge of the Town and Country Planning Acts and London Building Acts.

Application forms, returnable by first post on Tuesday, 16th May, 1961, obtainable from Mr. C. N. Cowney, Borough Engineer and Surveyor, Town Hall, Upper Street, N.1.

H. DIXON CLARK,
Town Clerk. 7253

HUYTON-WITH-ROBY URBAN DISTRICT COUNCIL

(Population—63,000)

Applications are invited for the appointment of a CHIEF ASSISTANT ARCHITECT at a salary in accordance with N.J.C.—A.P.T. V, £1,310 to £1,480.

Candidates must be Associates of the Royal Institute of British Architects. They should have considerable experience in the design of public buildings and handling technical administration.

Housing accommodation will be provided if required.

Applications stating age, present position, salary and date of appointment, details of experience and previous appointments, with dates, together with names and addresses of two referees to reach R. T. Chappelle, A.R.I.B.A., Architect and Housing Director, "Grasscroft," Archway Road, Huyton, by Wednesday, 24th May, 1961.

D. WILLGOOSE,
Clerk of the Council.

Council Offices,
Derby Road,
Huyton. S7254

BOROUGH OF CHATHAM

Applications are invited for the following appointments:—

1. ASSISTANT ARCHITECT—from professionally qualified and suitably experienced persons. Salary within A.P.T. IV (£1,140—£1,310).

2. ARCHITECTURAL ASSISTANT—from suitably experienced persons. Salary within A.P.T. III (£960—£1,140).

Applications, with the names and addresses of two referees, should be delivered to Mr. J. A. T. Richards, Borough Engineer and Surveyor, Town Hall, Chatham, not later than Saturday, 20th May, 1961.

HOUSING ACCOMMODATION WILL BE AVAILABLE IN APPROPRIATE CASES.

The appointments will be (*a*) in accordance with the National Scheme of Conditions of Service, (*b*) terminable by one month's notice on either side, and (*c*) superannuable, subject to satisfactory medical report.

In accordance with their usual practice the Council will require the successful candidates to give an undertaking to remain in the Council's service for two years.

ROWLAND NEWNES,
Town Clerk.

Town Hall,
Chatham. S7315

UNIVERSITY OF HONG KONG
ASSISTANT LECTURESHIP IN ARCHITECTURE

Applications are invited for the above-mentioned post. Applicants should have a degree from a University recognised by the Royal Institute of British Architects and should be A.R.I.B.A.

The successful applicant will be required to teach basic architectural techniques in the First Year, including draughtsmanship, perspective skiagraphy, lettering and colour theory, and some evidence of an ability to do this should be submitted with applications. The ability to offer courses in some specialised aspect of architecture will be an additional consideration.

Annual salary (superannuable) is: £1,375 × £50 —£1,525 for a man or £1,040 × £40—£1,160 for a woman. There is also an expatriation allowance of £225 a year if applicable. Salaries are under review. The equivalent of income tax in the Colony is comparatively low.

First Class sea passages are provided for expatriate staff and their families on first appointment and leaves. Accommodation at reasonable rental is provided for those receiving expatriation allowance.

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 36 Gordon Square, London, W.C.1.

Applications close, in Hong Kong and London, on 22nd June, 1961. 7266

CITY OF GLASGOW
ASSISTANT ARCHITECTS

The Architectural and Planning Department has a number of vacancies for qualified assistant architects.

The Department has in hand a large, varied and interesting programme of work, including Comprehensive Redevelopment, Multi-storey Flats, Schools and Civic Buildings. The work will provide scope for personal initiative in the preparation of designs and details of schemes upon which construction work will follow.

The salary scale for these assistantships is up to £1,560 with placing according to experience.

A five-day week is in operation.

Advances up to 100 per cent. of valuation will be made available, where needed, for the purchase of suitable houses in or near Glasgow, by successful applicants.

Form of application may be obtained from the Principal Administrative Officer, 20 Trongate, Glasgow, C.1.

A. G. JURY,
City Architect and Director of Planning.
S7268

COUNTY BOROUGH OF ROTHERHAM
SENIOR ASSISTANT ARCHITECT

Applications are invited for the appointment of a Senior Assistant Architect, A.P.T. V (£1,310—£1,480).

The department has a varied and interesting programme of architectural work, including schools and central redevelopment area, and candidates are required to be Associate Members of the R.I.B.A. with good general experience in design and construction. The commencing salary in the grade will be according to capabilities and experience.

Housing accommodation will be available if necessary.

Applications to be endorsed "Senior Assistant Architect," stating age, qualifications and details of experience, together with names of two referees, should be received by me not later than Wednesday, 10th May, 1961.

Canvassing will disqualify.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
April, 1961. 7239

BEESTON AND STAPLEFORD URBAN DISTRICT COUNCIL
ASSISTANT ARCHITECT, Grade A.P.T. III/IV (£960—£1,140—£1,310)

Applications from suitably qualified persons, accompanied by the names of two referees, should be forwarded to the Housing Architect, Town Hall, Beeston, Nottingham, within 14 days.

Commencing salary according to qualifications and experience.

Housing accommodation will be made available, if necessary.

H. D. JEFFRIES,
Clerk of the Council.

Town Hall,
Beeston. 7286

INVESTIGATOR OR SENIOR INVESTIGATOR (ARCHITECTURAL)
ROYAL COMMISSION ON ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND

Pensionable post for man or woman as (*a*) Investigator or (*b*) Senior Investigator according to age, qualifications and experience. Age on 1st May, 1961, for (*a*) at least 22 and normally under 35, for (*b*) at least 28. Qualifications: (*a*) Intermediate R.I.B.A. or exemption: (*b*) degree in architecture or A.R.I.B.A. Ability in architectural drawing and interest in history of architecture essential. Experience of descriptive writing an advantage. Final year students may apply. Selection by interview in Edinburgh. National salary scales: (*a*) £738—£1,222, (*b*) £1,352—£1,919. Starting salary for (*a*) may be above minimum. Write Royal Commission on the Ancient and Historical Monuments of Scotland, 7 Coates Gardens, Edinburgh, 12, for application form. Closing date 30th May, 1961. 7307

BOROUGH OF HAMMERSMITH
ARCHITECTURAL APPOINTMENTS

ASSISTANT ARCHITECT (A.P.T. V, £1,355—£1,525 p.a.). Applicants must be A.R.I.B.A. or hold equivalent qualification.

ARCHITECTURAL ASSISTANTS (A.P.T. IV, £1,185—£1,355 p.a.). Intermediate R.I.B.A. essential. Preference will be given to applicants who have passed Part 1 or 2 of the R.I.B.A. Final examination or have satisfactorily completed a course at a school of architecture.

DRAUGHTSMAN OR TRACER (male or female). Starting salary according to age, G.C.E. qualification and experience, between £515 and £615 p.a. at 22 and rising to £820 p.a. if suitably qualified.

The Department is engaged in varied and interesting works, including multi-storey flats in tall blocks, public buildings and depots.

Application forms for these appointments (returnable by 22nd May) from Town Clerk, Town Hall, Hammersmith, W.6. S7293

BOROUGH OF HESTON AND ISLEWORTH
APPOINTMENT OF
SENIOR ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of a Senior Architectural Assistant in the Borough Engineer and Surveyor's Department. Salary in accordance with A.P.T. Grade IV (£1,140—£1,310, plus London weighting).

Applicants must have had good experience in architectural design and building work under construction, and, other things being equal, preference will be given to applicants who have passed the examination for Associate R.I.B.A. or hold a University Degree or Diploma in architecture accepted by that Institute.

The Council is unable to assist the successful candidate with housing accommodation.

Applications are to be submitted by 22nd May, 1961, on forms to be obtained from and returned to the Borough Engineer and Surveyor, 88 Lampton Road, Hounslow.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow, Middlesex. S7292

WEST SUFFOLK COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the post of ASSISTANT ARCHITECT within Grade A.P.T. IV-V (£1,140—£1,480 per annum).

Applicants must be qualified Architects and preferably have experience in Local Authority work.

The department offers varied and interesting experience on Educational, Police and Health programmes.

N.J.C. Service Conditions; post pensionable; medical examination.

A five-day week is in operation; housing accommodation may be made available.

Application forms obtainable from the County Architect, 13 Westgate Street, Bury St. Edmunds, to be returned as soon as possible. S7299

METROPOLITAN BOROUGH OF BERMONDSEY

Applications are invited from persons under 51 years of age for the following temporary appointments.

SENIOR ASSISTANT ARCHITECT required for about two years to design a Public Baths and later to lead a small group in the preparation of working drawings and specifications. Applicants must be qualified by examination as Associates of the R.I.B.A. Salary up to £1,565 per annum according to qualifications and experience.

ASSISTANT IN ARCHITECT'S SECTION. Applicants must have passed Intermediate examination of R.I.B.A. or R.I.C.S. and have experience in surveying old housing properties and preparing conversion and improvement schemes. Salary at a point in A.P.T. III or IV (£960—£1,310) plus London weighting according to experience.

Applications for both appointments should be addressed to Borough Engineer and Surveyor, Municipal Offices, Spa Road, S.E.16. S7306

ARCHITECTURAL ASSISTANT

BRITISH TRANSPORT DOCKS invite applications for an Architectural Assistant at SOUTHAMPTON DOCKS. Candidates should be experienced in design and construction of industrial and office buildings by contract or direct labour and must be A.R.I.B.A. Ability to handle contracts direct with contractor. Commencing salary £1,175 per annum. Contributory Superannuation Scheme and certain rail travel facilities.

Applications, giving age, experience, qualifications and present position, to be forwarded to Staff and Establishment Officer, British Transport Docks (A), Melbury House, Melbury Terrace, London, N.W.1, to arrive not later than Thursday, 11th May, 1961. 7279

DRAUGHTSMAN OR WOMAN in Department of Geography, Queen Mary College (University of London), Mile End Road, E.1. Skilled draughtsmanship and experience in dealing with maps essential. Salary placing on Senior Technician scale £690 × £25 — £815 p.a. according to ability, with London Weighting up to £45. Supplement for certain qualifications. Four weeks annual leave. Pension Scheme. Handwritten letters only to Registrar (GST) stating age, education, details of past and present work, and names of two persons to whom reference can be made. 7320

CITY OF LEICESTER
CITY ARCHITECT'S DEPARTMENT

Applications are invited from Architects for the following:

CHIEF ASSISTANT, Scale C, £1,560—£1,825.
GROUP LEADERS, Scale A, £1,340—£1,565.
SENIOR ASSISTANTS, A.P.T. IV/V, £1,140—£1,480.
ASSISTANTS, A.P.T. III/IV, £960—£1,310.
ARCHITECTURAL ASSISTANT, A.P.T. II, £815—£960.

Housing accommodation provided in appropriate cases. Five-day week in operation. Modern office accommodation.

The Department, organised on a group basis to encourage team-work, is being expanded to deal with an increased building programme and to carry out research into building methods and costs. The current building programme includes: Schools, Colleges of Further Education, Central Swimming Baths, Hostels, Youth Centres, Community Centres, Specialist Centres for Handicapped Persons, Housing and Central Area Re-Development Schemes including Markets, Bus Stations, etc.

Leicester, as a member of the Consortium of Local Authorities (CLASP) is engaged on research and development work on buildings of advanced design.

Applications from qualified persons by May 15th stating post applied for, grade and salary required with names of two referees to: J. H. Lloyd Owen, B.Arch., F.R.I.B.A., City Architect, 10 Loseby Lane, Leicester. 7310

AIR MINISTRY requires QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates.

Salary, which is dependent upon age, qualifications and experience, ranges from £726 (age 23) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, viz:

Technical Grade II:	£961—£1,098	123 posts
Technical Grade I:	£1,098—£1,348	42 posts
Technical Grade B:	£1,348—£1,552	6 posts
Technical Grade A:	£1,439—£1,697	6 posts

Vacancies occurring in the higher grades are, as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances ranging at present up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Five-day week with 18 days paid leave a year initially.

Applicants who must be natural born British subjects, must hold O.N.C. (Building or Builders Quantities) or equivalent and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. Schedule an advantage. Forms from Manager (P.E.2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised. S7028

METROPOLITAN BOROUGH OF HACKNEY
ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the following permanent appointments in the Architectural Section:

(*a*) ASSISTANT ARCHITECT
(i)—A.P.T. IV (£1,140—£1,310 p.a.).
(ii)—A.P.T. III/IV (£960—£1,310 p.a.).
(*b*) ARCHITECTURAL ASSISTANT
(i)—A.P.T. I/II (£645—£960 p.a.).
(ii)—A.P.T. II (£815 to £960 p.a.).
(iii)—A.P.T. III (£960—£1,140 p.a.).
(*c*) JUNIOR ARCHITECTURAL ASSISTANT—A.P.T. I (£645—£815 p.a.).

Candidates for (*a*) must have passed the Final Examination of the R.I.B.A.; for (*b*) (except (i)) must have passed the Intermediate Examination of the R.I.B.A. or its equivalent; and for (*c*) should be students of the R.I.B.A. or Probationers. London Weighting allowance payable in addition (£45 p.a. for A.P.T. III posts and above). Commencing salaries according to training, qualifications and experience. Modern staff canteen; alternate Saturdays; post-entry training facilities; possible 100% advances for house-purchase. Application forms from Town Clerk, Town Hall, Hackney, E.8, returnable by 9 a.m., 12th May, 1961. 7321

COUNTY BOROUGH OF GREAT YARMOUTH
SCHOOLS ARCHITECT'S DEPARTMENT

Applications are invited from Associate Members of the R.I.B.A. for the appointment of MINOR WORKS ARCHITECT at a salary within APT.IV £1,140 to £1,310 per annum. A car allowance of £135 per annum is also payable.

The successful applicant will be required to take charge of the Minor Works Section.

Assistance with removal expenses may be made in suitable cases.

Full details of present and past appointments, age, qualifications and experience, together with the names of two referees, should reach the Schools Architect, 22 Euston Road, Great Yarmouth, by 24th May, 1961.

D. G. FARROW
Chief Education Officer.

22 Euston Road,
Great Yarmouth. S7337

BOROUGH OF BACUP
ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment in the Borough Engineer's Department. Salary A.P.T. III (£960—£1,140). Preference will be given to candidates who have passed Parts 1 and 2 of the R.I.B.A. Examination or equivalent.

The post offers special experience in the spheres of Central Area Re-Development and Industrial and Residential Development.

Housing accommodation will be provided, if necessary.

Application forms obtainable from me. Closing date, 27th May, 1961.

A. D. BOND,
Town Clerk.

Municipal Offices,
Bacup. S7334

CITY OF SHEFFIELD
CITY ARCHITECT'S DEPARTMENT

Enthusiastic and imaginative architects possessing drive and determination are invited to apply for the following posts on the permanent staff of the City Architect, Mr. J. L. Womersley.

(*a*) SENIOR ASSISTANT ARCHITECTS
Grade A.P.T. IV (£1,140—£1,310).

(*b*) ASSISTANT ARCHITECTS
Grade A.P.T. III-IV (£960—£1,310).

Opportunities are available for work on large scale schemes of redevelopment and new development and on challenging schemes of urban renewal.

Assistants are urgently required for the Education and General Section which is responsible for an expanding and interesting programme of large and important civic buildings, including the Town Hall Extensions, colleges, schools, libraries, art galleries, old people's and children's homes, fire and police stations, health centres and clinics.

COMMENCING SALARIES WITHIN THE ABOVE GRADES ACCORDING TO QUALIFICATIONS AND EXPERIENCE.

Applications for posts (*b*) will be welcomed from students completing their training this year and from young qualified architects seeking appointments offering considerable scope.

Applications stating post applied for, age, education and training, qualifications, present and past appointments (with dates and salaries), experience and the names of two persons to whom reference may be made should reach me by Monday, 15th May, 1961.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1. 7333

LANCASHIRE COUNTY COUNCIL
DEPUTY ASSISTANT PLANNING OFFICER

required in the Development Section at Headquarters; salary J.N.C. Grade 'C' (£1,560—£1,825).

This officer will, through the Assistant County Planning Officer, assist in the execution of policy relating to Development Plan preparation, submission and modification and appropriate co-ordination with outstationed offices.

Experience is required in the reception of overspill population and experience of urban reconstruction schemes would be an advantage. Applicants must have a sound knowledge of general planning and development legislation and experience of development control procedure, consultation and administration.

Candidates should have an appropriate University degree and/or one or more of the following qualifications—A.R.I.C.S., A.M.I.C.E., A.M.I. Mun.E., A.M.T.P.I.

Applications stating age, qualifications, present appointment, experience and two referees to the County Planning Officer (S), East Cliff County Offices, Preston, by the 11th May, 1961, in envelopes marked 'D.A.P.O.' 7336

HAILSHAM RURAL DISTRICT COUNCIL
SECOND ARCHITECTURAL ASSISTANT
AMENDED ADVERTISEMENT

Assistants who have passed Parts I and II of the R.I.B.A. Final or its equivalent are invited to apply for this appointment, involving the design of new buildings and an interesting range of architectural work.

The salary will be within Grade A.P.T. III (£960—£1,140) commencing at a point commensurate with the applicant's qualifications and experience.

The appointment is superannuable and subject to the National Scheme of Conditons of Service. A car allowance will be paid and a five-day week is in opration.

Applications by letter giving information which will assist in the selection of the most suitable person, together with the names and addresses of two referees, should reach the undersigned not later than 19th May, 1961.

A. CARR,
Clerk to the Council.

Cortlandt,
Hailsham,
Sussex. 7325

EAST SUSSEX COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT

PLANNING ASSISTANT required in Area Planning Office at Crowborough. Scale A.P.T. III (£960 to £1,140 per annum).

Particulars and application forms obtainable from County Planning Officer, County Hall, Lewes, Sussex, to be returned by the 17th May, 1961. S7309

HAILSHAM RURAL DISTRICT COUNCIL
ARCHITECTURAL ASSISTANT
Grade II (£815—£960)

Applications are invited for this post from assistants who have passed the R.I.B.A. Intermediate examination. The Council's building programme includes new housing, conversions and improvements to older houses together with close collaboration with the Engineers on road and sewer work.

The appointment is superannuable and subject to the National Scheme of Conditions of Service and a car allowance will be paid.

Commencing salary will not necessarily be at the bottom of the scale. Prospects of upgrading if the person appointed completes his studies to become a full member of the R.I.B.A.

Details of training, experience and previous appointments should be sent to the undersigned, together with the names and addresses of two referees, not later than 19th May, 1961.

A. CARR,
Clerk to the Council.

Cortlandt,
Hailsham,
Sussex. 7324

CITY OF LEICESTER EDUCATION COMMITTEE
LEICESTER COLLEGE OF ART
Principal: E. E. PULLEE, A.R.C.A., F.S.A.E.
SCHOOL OF ARCHITECTURE

Applications are invited from holders of a Degree or Diploma of a recognised School of Architecture, or from Associate Members of the R.I.B.A. for a POST-GRADUATE RESEARCH FELLOWSHIP IN ARCHITECTURE tenable at the School of Architecture, Leicester College of Art, for advanced work in Architecture. The holder of the Fellowship, which is for a period of up to three years, will be paid on the Burnham Scale, Grade B.

Further details may be obtained from the Registrar, Leicester College of Art, The Newarke, Leicester. 7322

STATES OF GUERNSEY
STATES ENGINEER'S DEPARTMENT

Applications are invited from suitably qualified persons for the following appointments in the States Engineer's Department, which has in hand a varied and interesting programme of work.

(1) QUANTITY SURVEYOR. Salary scale £1,180—£1,450 (subject to review).
Applicants for this post should be qualified Quantity Surveyors and fully conversant with the preparation of bills of quantities, specifications, pricing and the settlement of accounts. This is a new appointment and the successful applicant will be required to organise the work of this section of the department.

(2) ARCHITECTURAL ASSISTANTS. Salary scale £780—£1,100 (subject to review).
Applicants for these posts should have passed the Intermediate Examination of the R.I.B.A.

All appointments are to the Established Staff and subject to the States of Guernsey Conditions of Service, one month's notice on either side and the passing of a medical examination. Commencing salary in each case will be according to qualifications and experience. Particulars of pension and the transfer of pension rights under the Local Government Superannuation Acts are obtainable on application. Houses will be made available in appropriate cases and removal expenses refunded.

Applications, stating age, qualifications, present and previous appointments, experience and the names of two referees, should be sent to the States Supervisor, States Office, Guernsey, C.I. not later than the 22nd May, 1961. S7342

BOROUGH OF WIMBLEDON
ARCHITECTURAL DRAUGHTSMAN, Grade A.P.T.II, £815 to £960 plus London Weighting. Form of Application from Borough Engineer and Surveyor, Town Hall, Wimbledon, S.W.19. Returnable by 15th May, 1961. Canvassing disqualifies. 7329

COUNTY BOROUGH OF WEST BROMWICH
BOROUGH SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments:—

SENIOR ASSISTANT ARCHITECT. Salary A.P.T. IV (£1,140 to £1,310 per annum).

ARCHITECTURAL ASSISTANTS. Salary A.P.T. I (£645 to £815 per annum)

N.J.C. Conditions of Service, and a five-day week.

Applications, naming two referees, to the undersigned by 15th May, 1961.

W. H. GREENWOOD,
Borough Surveyor.

Town Hall,
West Bromwich. S7267

CITY OF PETERBOROUGH

Applications are invited from qualified Architects with Local Government experience for the appointment of a SENIOR ASSISTANT ARCHITECT in Grade IV, A.P. & T. (£1,140 to £1,310 by three increments), together with fixed car allowance of £108 per annum. Housing accommodation, if desired, will be provided.

Forms of application from City Engineer, Town Hall, Peterborough. Closing date for applications: 19th May, 1961.

C. PETER CLARKE,
Town Clerk.

Town Hall,
Peterborough.
April, 1961. S7285

STEVENAGE DEVELOPMENT CORPORATION

Applications are invited for the post of ASSISTANT LANDSCAPE ARCHITECT in the Chief Architect's Department on New Towns' Salary Grades APT.II £815/£960 or APT.III £960/£1,140 according to experience and qualifications but candidates should have passed the Intermediate examination of the Institute of Landscape Architects.

The work entailed is of an interesting nature and includes the treatment of Radburn type housing development amongst other projects.

Housing accommodation will be available in due course in an appropriate case.

Applications, giving full details and names of two referees, to be sent to the Chief Administrative Officer, Daneshill House, Danestrete, Stevenage, Herts., not later than Friday, 19th May, 1961. 7319

INVERNESS COUNTY COUNCIL invits applications for appointments in the County Architect's Department as follows:

(*a*) 1 FIRST ASSISTANT ARCHITECT—
Salary Scale £1,135—£1,200 per annum.

(*b*) 2 SECOND ASSISTANT ARCHITECTS—
Salary Scale £850—£1,150 per annum.

(*c*) 1 THIRD ASSISTANT ARCHITECT—
Salary Scale £640—£845 per annum.

Applicants for appointments (*a*) and (*b*) must be fully qualified. Appropriate placing on salary scales will be given in accordance with qualifications and experience. Housing accommodation may be made available if required. Applicants for appointment (*c*) must be qualified to intermediate stage. Applications, together with the names and addresses of three referees to the County Clerk, County Buildings, Ardross Street, Inverness, by 12th May, 1961. 7318

GLAMORGAN COUNTY COUNCIL

Invite applications for:—

(*a*) ASSISTANT PLANNING OFFICER for Eastern Area Office at Pontypridd.

(*b*) PLANNING ASSISTANT at County Hall, Cardiff.

Salary for (*a*) and (*b*) £1,140—£1,310 p.a. A lodging allowance will be paid in certain circumstances, and a car allowance will be payable in the case of appointment (*a*).

Applicants are required to have passed the final examination of the Town Planning Institute or other approved Professional Body or to be University Graduates, and in each case to have had five years' experience, including the period spent on theoretical training.

Applications stating age, qualifications and experience to the County Surveyor and Planning Officer, County Hall, Cardiff, and received by 12th May, 1961.

RICHARD JOHN,
Clerk of the County Council. 7345

COUNTY BOROUGH OF BARROW-IN-FURNESS
BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT
TECHNICAL STAFF

Applications are invited for the following posts:—

(*a*) PRINCIPAL ASSISTANT ARCHITECTS (2)
Grade V. £1,310—£1,480.

(*b*) TOWN PLANNING ASSISTANT (RE-DEVELOPMENT)
Grade IV-V. £1,140—£1,480.

(*c*) HEATING ENGINEER
Grade V. £1,310—£1,480.

(*d*) QUANTITY SURVEYOR
Grade V. £1,310—£1,480.

In each case commencing salary within the limits indicated.

Housing accommodation available. Five-day week.

Full details of posts and forms of application available from Borough Engineer and Surveyor. Closing date—26th May, 1961.

LAWRENCE ALLEN,
Town Clerk.

Town Hall,
Barrow-in-Furness. 7335

Architectural Appointments Vacant

3*s. per line; minimum* 12*s. Box Number, including forwarding replies,* 2*s. extra.*

RONALD WARD AND PARTNERS invite applications from ARCHITECTS, Senior and Junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply 29, Chesham Place, Belgrave Square, London, S.W.1. Tel.: BELgravia 3361. TC2960

£950-£1,500. ARCHITECTURAL ASSISTANTS with imagination and designing ability required to assist with large and important new developments in the central London Area. Telephone or write: Trehearne & Norman, Preston & Partners, 83, Kingsway, W.C.2. HOLborn 4071. TC4934

YORKE, ROSENBERG AND MARDALL have some vacancies for experienced STAFF, starting salary according to qualifications and experience, in the range £950—£1,200. Ring AMBassador 4521 for appointment. TC6200

UNIVERSITY OF HONG KONG
ASSISTANT LECTURESHIP IN ARCHITECTURE

Applications are invited for the above-mentioned post. Applicants should have a degree from a University recognised by the Royal Institute of British Architects and should be A.R.I.B.A.

The successful applicant will be required to teach basic architectural techniques in the First Year, including draughtsmanship, perspective skiagraphy, lettering and colour theory, and some evidence of an ability to do this should be submitted with applications. The ability to offer courses in some specialised aspect of architecture will be an additional consideration.

Annual salary (superannuable) is: £1,375 × £50 —£1,525 for a man or £1,040 × £40—£1,160 for a woman. There is also an expatriation allowance of £225 a year if applicable. Salaries are under review. The equivalent of income tax in the Colony is comparatively low.

First Class sea passages are provided for expatriate staff and their families on first appointment and leaves. Accommodation at reasonable rental is provided for those receiving expatriation allowance.

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 36 Gordon Square, London, W.C.1.

Applications close, in Hong Kong and London, on 22nd June, 1961. 7266

CITY OF GLASGOW
ASSISTANT ARCHITECTS

The Architectural and Planning Department has a number of vacancies for qualified assistant architects.

The Department has in hand a large, varied and interesting programme of work, including Comprehensive Redevelopment, Multi-storey Flats, Schools and Civic Buildings. The work will provide scope for personal initiative in the preparation of designs and details of schemes upon which construction work will follow.

The salary scale for these assistantships is up to £1,560 with placing according to experience.

A five-day week is in operation.

Advances up to 100 per cent. of valuation will be made available, where needed, for the purchase of suitable houses in or near Glasgow, by successful applicants.

Form of application may be obtained from the Principal Administrative Officer, 20 Trongate, Glasgow, C.1.

A. G. JURY,
City Architect and Director of Planning.
S7268

COUNTY BOROUGH OF ROTHERHAM
SENIOR ASSISTANT ARCHITECT

Applications are invited for the appointment of a Senior Assistant Architect, A.P.T. V (£1,310—£1,480).

The department has a varied and interesting programme of architectural work, including schools and central redevelopment area, and candidates are required to be Associate Members of the R.I.B.A. with good general experience in design and construction. The commencing salary in the grade will be according to capabilities and experience.

Housing accommodation will be available if necessary.

Applications to be endorsed "Senior Assistant Architect," stating age, qualifications and details of experience, together with names of two referees, should be received by me not later than Wednesday, 10th May, 1961.

Canvassing will disqualify.

JOHN S. WALL,
Town Clerk.

Municipal Offices,
Rotherham.
April, 1961. 7239

BEESTON AND STAPLEFORD URBAN DISTRICT COUNCIL
ASSISTANT ARCHITECT, Grade A.P.T. III/IV (£960—£1,140—£1,310)

Applications from suitably qualified persons, accompanied by the names of two referees, should be forwarded to the Housing Architect, Town Hall, Beeston, Nottingham, within 14 days.

Commencing salary according to qualifications and experience.

Housing accommodation will be made available, if necessary.

H. D. JEFFRIES,
Clerk of the Council.

Town Hall,
Beeston. 7286

INVESTIGATOR OR SENIOR INVESTIGATOR (ARCHITECTURAL)
ROYAL COMMISSION ON ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND

Pensionable post for man or woman as (*a*) Investigator or (*b*) Senior Investigator according to age, qualifications and experience. Age on 1st May, 1961, for (*a*) at least 22 and normally under 35, for (*b*) at least 28. Qualifications: (*a*) Intermediate R.I.B.A. or exemption; (*b*) degree in architecture or A.R.I.B.A. Ability in architectural drawing and interest in history of architecture essential. Experience of descriptive writing an advantage. Final year students may apply. Selection by interview in Edinburgh. National salary scales: (*a*) £738—£1,222, (*b*) £1,352—£1,919. Starting salary for (*a*) may be above minimum. Write Royal Commission on the Ancient and Historical Monuments of Scotland, 7 Coates Gardens, Edinburgh, 12, for application form. Closing date 30th May, 1961. 7307

BOROUGH OF HAMMERSMITH
ARCHITECTURAL APPOINTMENTS

ASSISTANT ARCHITECT (A.P.T. V, £1,355—£1,525 p.a.). Applicants must be A.R.I.B.A. or hold equivalent qualification.

ARCHITECTURAL ASSISTANTS (A.P.T. IV, £1,185—£1,355 p.a.). Intermediate R.I.B.A. essential. Preference will be given to applicants who have passed Part 1 or 2 of the R.I.B.A. Final examination or have satisfactorily completed a course at a school of architecture.

DRAUGHTSMAN OR TRACER (male or female). Starting salary according to age, G.C.E. qualification and experience, between £515 and £615 p.a. at 22 and rising to £820 p.a. if suitably qualified.

The Department is engaged in varied and interesting works, including multi-storey flats in tall blocks, public buildings and depots.

Application forms for these appointments (returnable by 22nd May) from Town Clerk, Town Hall, Hammersmith, W.6. S7293

BOROUGH OF HESTON AND ISLEWORTH
APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT

Applications are invited for the permanent appointment of a Senior Architectural Assistant in the Borough Engineer and Surveyor's Department. Salary in accordance with A.P.T. Grade IV (£1,140—£1,310, plus London weighting).

Applicants must have had good experience in architectural design and building work under construction, and, other things being equal, preference will be given to applicants who have passed the examination for Associate R.I.B.A. or hold a University Degree or Diploma in architecture accepted by that Institute.

The Council is unable to assist the successful candidate with housing accommodation.

Applications are to be submitted by 22nd May, 1961, on forms to be obtained from and returned to the Borough Engineer and Surveyor, 88 Lampton Road, Hounslow.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow, Middlesex. S7292

WEST SUFFOLK COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT

Applications are invited for the post of ASSISTANT ARCHITECT within Grade A.P.T. IV-V (£1,140—£1,480 per annum).

Applicants must be qualified Architects and preferably have experience in Local Authority work.

The department offers varied and interesting experience on Educational, Police and Health programmes.

N.J.C. Service Conditions; post pensionable; medical examination.

A five-day week is in operation; housing accommodation may be made available.

Application forms obtainable from the County Architect, 13 Westgate Street, Bury St. Edmunds, to be returned as soon as possible. S7299

METROPOLITAN BOROUGH OF BERMONDSEY

Applications are invited from persons under 51 years of age for the following temporary appointments.

SENIOR ASSISTANT ARCHITECT required for about two years to design a Public Baths and later to lead a small group in the preparation of working drawings and specifications. Applicants must be qualified by examination as Associates of the R.I.B.A. Salary up to £1,565 per annum according to qualifications and experience.

ASSISTANT IN ARCHITECT'S SECTION. Applicants must have passed Intermediate examination of R.I.B.A. or R.I.C.S. and have experience in surveying old housing properties and preparing conversion and improvement schemes. Salary at a point in A.P.T. III or IV (£960—£1,310) plus London weighting according to experience.

Applications for both appointments should be addressed to Borough Engineer and Surveyor, Municipal Offices, Spa Road, S.E.16. S7306

ARCHITECTURAL ASSISTANT

BRITISH TRANSPORT DOCKS invite applications for an Architectural Assistant at SOUTHAMPTON DOCKS. Candidates should be experienced in design and construction of industrial and office buildings by contract or direct labour and must be A.R.I.B.A. Ability to handle contracts direct with contractor. Commencing salary £1,175 per annum. Contributory Superannuation Scheme and certain rail travel facilities.

Applications, giving age, experience, qualifications and present position, to be forwarded to Staff and Establishment Officer, British Transport Docks (A), Melbury House, Melbury Terrace, London, N.W.1, to arrive not later than Thursday, 11th May, 1961. 7279

DRAUGHTSMAN OR WOMAN in Department of Geography, Queen Mary College (University of London), Mile End Road, E.1. Skilled draughtsmanship and experience in dealing with maps essential. Salary placing on Senior Technician scale £690 × £25 — £815 p.a. according to ability, with London Weighting up to £45. Supplement for certain qualifications. Four weeks annual leave. Pension Scheme. Handwritten letters only to Registrar (GST) stating age, education, details of past and present work, and names of two persons to whom reference can be made. 7320

CITY OF LEICESTER
CITY ARCHITECT'S DEPARTMENT

Applications are invited from Architects for the following:

CHIEF ASSISTANT, Scale C, £1,560—£1,825.
GROUP LEADERS, Scale A, £1,340—£1,565.
SENIOR ASSISTANTS, A.P.T. IV/V, £1,140—£1,480.
ASSISTANTS, A.P.T. III/IV, £960—£1,310.
ARCHITECTURAL ASSISTANT, A.P.T. II, £815—£960.

Housing accommodation provided in appropriate cases. Five-day week in operation. Modern office accommodation.

The Department, organised on a group basis to encourage team-work, is being expanded to deal with an increased building programme and to carry out research into building methods and costs. The current building programme includes: Schools, Colleges of Further Education, Central Swimming Baths, Hostels, Youth Centres, Community Centres, Specialist Centres for Handicapped Persons, Housing and Central Area Re-Development Schemes including Markets, Bus Stations, etc.

Leicester, as a member of the Consortium of Local Authorities (CLASP) is engaged on research and development work on buildings of advanced design.

Applications from qualified persons by May 15th stating post applied for, grade and salary required with names of two referees to: J. H. Lloyd Owen, B.Arch., F.R.I.B.A., City Architect, 10 Loseby Lane, Leicester. 7310

AIR MINISTRY requires QUANTITY SURVEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of estimates.

Salary, which is dependent upon age, qualifications and experience, ranges from £726 (age 23) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, viz:

Technical Grade II:	£961—£1,098	123 posts
Technical Grade I:	£1,098—£1,348	42 posts
Technical Grade B:	£1,348—£1,552	6 posts
Technical Grade A:	£1,439—£1,697	6 posts

Vacancies occurring in the higher grades are, as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances ranging at present up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. Five-day week with 18 days paid leave a year initially.

Applicants who must be natural born British subjects, must hold O.N.C. (Building or Builders Quantities) or equivalent and have had good experience under Quantity Surveyor or Building Contractor. Knowledge of W.D. Schedule an advantage. Forms from Manager (P.E.2), Ministry of Labour, Professional and Executive Register, Atlantic House, Farringdon Street, London, E.C.4. Candidates selected will be interviewed in Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview will be advised. S7028

METROPOLITAN BOROUGH OF HACKNEY
ENGINEER AND SURVEYOR'S DEPARTMENT

Applications are invited for the following permanent appointments in the Architectural Section:

(*a*) ASSISTANT ARCHITECT
(i)—A.P.T. IV (£1,140—£1,310 p.a.).
(ii)—A.P.T. III/IV (£960—£1,310 p.a.).

(*b*) ARCHITECTURAL ASSISTANT
(i)—A.P.T. I/II (£645—£960 p.a.).
(ii)—A.P.T. II (£815 to £960 p.a.).
(iii)—A.P.T. III (£960—£1,140 p.a.).

(*c*) JUNIOR ARCHITECTURAL ASSISTANT—A.P.T. I (£645—£815 p.a.).

Candidates for (*a*) must have passed the Final Examination of the R.I.B.A.; for (*b*) (except (i)) must have passed the Intermediate Examination of the R.I.B.A. or its equivalent; and for (*c*) should be students of the R.I.B.A. or Probationers. London Weighting allowance payable in addition (£45 p.a. for A.P.T. III posts and above). Commencing salaries according to training, qualifications and experience. Modern staff canteen: alternate Saturdays; post-entry training facilities; possible 100% advances for house-purchase. Application forms from Town Clerk, Town Hall, Hackney, E.8, returnable by 9 a.m., 12th May, 1961. 7321

COUNTY BOROUGH OF GREAT YARMOUTH
SCHOOLS ARCHITECT'S DEPARTMENT

Applications are invited from Associate Members of the R.I.B.A. for the appointment of MINOR WORKS ARCHITECT at a salary within APT.IV £1,140 to £1,310 per annum. A car allowance of £135 per annum is also payable.

The successful applicant will be required to take charge of the Minor Works Section.

Assistance with removal expenses may be made in suitable cases.

Full details of present and past appointments, age, qualifications and experience, together with the names of two referees, should reach the Schools Architect, 22 Euston Road, Great Yarmouth, by 24th May, 1961.

D. G. FARROW
Chief Education Officer.

22 Euston Road,
Great Yarmouth. S7337

BOROUGH OF BACUP
ARCHITECTURAL ASSISTANT

Applications are invited for the above appointment in the Borough Engineer's Department. Salary A.P.T. III (£960—£1,140). Preference will be given to candidates who have passed Parts 1 and 2 of the R.I.B.A. Examination or equivalent.

The post offers special experience in the spheres of Central Area Re-Development and Industrial and Residential Development.

Housing accommodation will be provided, if necessary.

Application forms obtainable from me. Closing date, 27th May, 1961.

A. D. BOND,
Town Clerk.

Municipal Offices,
Bacup. S7334

CITY OF SHEFFIELD
CITY ARCHITECT'S DEPARTMENT

Enthusiastic and imaginative architects possessing drive and determination are invited to apply for the following posts on the permanent staff of the City Architect, Mr. J. L. Womersley.

(*a*) SENIOR ASSISTANT ARCHITECTS
Grade A.P.T. IV (£1,140—£1,310).

(*b*) ASSISTANT ARCHITECTS
Grade A.P.T. III-IV (£960—£1,310).

Opportunities are available for work on large scale schemes of redevelopment and new development and on challenging schemes of urban renewal.

Assistants are urgently required for the Education and General Section which is responsible for an expanding and interesting programme of large and important civic buildings, including the Town Hall Extensions, colleges, schools, libraries, art galleries, old people's and children's homes, fire and police stations, health centres and clinics.

COMMENCING SALARIES WITHIN THE ABOVE GRADES ACCORDING TO QUALIFICATIONS AND EXPERIENCE.

Applications for posts (*b*) will be welcomed from students completing their training this year and from young qualified architects seeking appointments offering considerable scope.

Applications stating post applied for, age, education and training, qualifications, present and past appointments (with dates and salaries), experience and the names of two persons to whom reference may be made should reach me by Monday, 15th May, 1961.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1. 7333

LANCASHIRE COUNTY COUNCIL
DEPUTY ASSISTANT PLANNING OFFICER

required in the Development Section at Headquarters; salary J.N.C. Grade 'C' (£1,560—£1,825).

This officer will, through the Assistant County Planning Officer, assist in the execution of policy relating to Development Plan preparation, submission and modification and appropriate coordination with outstationed offices.

Experience is required in the reception of overspill population and experience of urban reconstruction schemes would be an advantage. Applicants must have a sound knowledge of general planning and development legislation and experience of development control procedure, consultation and administration.

Candidates should have an appropriate University degree and/or one or more of the following qualifications—A.R.I.C.S., A.M.I.C.E., A.M.I. Mun.E., A.M.T.P.I.

Applications stating age, qualifications, present appointment, experience and two referees to the County Planning Officer (S), East Cliff County Offices, Preston, by the 11th May, 1961, in envelopes marked 'D.A.P.O.' 7336

HAILSHAM RURAL DISTRICT COUNCIL
SECOND ARCHITECTURAL ASSISTANT
AMENDED ADVERTISEMENT

Assistants who have passed Parts I and II of the R.I.B.A. Final or its equivalent are invited to apply for this appointment, involving the design of new buildings and an interesting range of architectural work.

The salary will be within Grade A.P.T. III (£960—£1,140) commencing at a point commensurate with the applicant's qualifications and experience.

The appointment is superannuable and subject to the National Scheme of Conditons of Service. A car allowance will be paid and a five-day week is in opgration.

Applications by letter giving information which will assist in the selection of the most suitable person, together with the names and addresses of two referees, should reach the undersigned not later than 19th May, 1961.

A. CARR,
Clerk to the Council.

Cortlandt,
Hailsham,
Sussex. 7325

EAST SUSSEX COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT

PLANNING ASSISTANT required in Area Planning Office at Crowborough. Scale A.P.T. III (£960 to £1,140 per annum).

Particulars and application forms obtainable from County Planning Officer, County Hall, Lewes, Sussex, to be returned by the 17th May, 1961. S7309

HAILSHAM RURAL DISTRICT COUNCIL
ARCHITECTURAL ASSISTANT
Grade II (£815—£960)

Applications are invited for this post from assistants who have passed the R.I.B.A. Intermediate examination. The Council's building programme includes new housing, conversions and improvements to older houses together with close collaboration with the Engineers on road and sewer work.

The appointment is superannuable and subject to the National Scheme of Conditions of Service and a car allowance will be paid.

Commencing salary will not necessarily be at the bottom of the scale. Prospects of upgrading if the person appointed completes his studies to become a full member of the R.I.B.A.

Details of training, experience and previous appointments should be sent to the undersigned, together with the names and addresses of two referees, not later than 19th May, 1961.

A. CARR,
Clerk to the Council.

Cortlandt,
Hailsham,
Sussex. 7324

CITY OF LEICESTER EDUCATION COMMITTEE
LEICESTER COLLEGE OF ART
Principal: E. E. PULLEE, A.R.C.A., F.S.A.E.
SCHOOL OF ARCHITECTURE

Applications are invited from holders of a Degree or Diploma of a recognised School of Architecture, or from Associate Members of the R.I.B.A. for a POST-GRADUATE RESEARCH FELLOWSHIP IN ARCHITECTURE tenable at the School of Architecture, Leicester College of Art, for advanced work in Architecture. The holder of the Fellowship, which is for a period of up to three years, will be paid on the Burnham Scale, Grade B.

Further details may be obtained from the Registrar, Leicester College of Art, The Newarke, Leicester. 7322

STATES OF GUERNSEY
STATES ENGINEER'S DEPARTMENT

Applications are invited from suitably qualified persons for the following appointments in the States Engineer's Department, which has in hand a varied and interesting programme of work.

(1) QUANTITY SURVEYOR. Salary scale £1,180—£1,450 (subject to review).
Applicants for this post should be qualified Quantity Surveyors and fully conversant with the preparation of bills of quantities, specifications, pricing and the settlement of accounts. This is a new appointment and the successful applicant will be required to organise the work of this section of the department.

(2) ARCHITECTURAL ASSISTANTS. Salary scale £780—£1,100 (subject to review).
Applicants for these posts should have passed the Intermediate Examination of the R.I.B.A.

All appointments are to the Established Staff and subject to the States of Guernsey Conditions of Service, one month's notice on either side and the passing of a medical examination. Commencing salary in each case will be according to qualifications and experience. Particulars of pension and the transfer of pension rights under the Local Government Superannuation Acts are obtainable on application. Houses will be made available in appropriate cases and removal expenses refunded.

Applications, stating age, qualifications, present and previous appointments, experience and the names of two referees, should be sent to the States Supervisor, States Office, Guernsey, C.I. not later than the 22nd May, 1961. S7342

BOROUGH OF WIMBLEDON
ARCHITECTURAL DRAUGHTSMAN, Grade A.P.T.II, £815 to £960 plus London Weighting. Form of Application from Borough Engineer and Surveyor, Town Hall, Wimbledon, S.W.19. Returnable by 15th May, 1961. Canvassing disqualifies. 7329

COUNTY BOROUGH OF WEST BROMWICH
BOROUGH SURVEYOR'S DEPARTMENT

Applications are invited for the following appointments:—

SENIOR ASSISTANT ARCHITECT. Salary A.P.T. IV (£1,140 to £1,310 per annum).

ARCHITECTURAL ASSISTANTS. Salary A.P.T. I (£645 to £815 per annum)

N.J.C. Conditions of Service, and a five-day week.

Applications, naming two referees, to the undersigned by 15th May, 1961.

W. H. GREENWOOD,
Borough Surveyor.

Town Hall,
West Bromwich. S7267

CITY OF PETERBOROUGH

Applications are invited from qualified Architects with Local Government experience for the appointment of a SENIOR ASSISTANT ARCHITECT in Grade IV, A.P. & T. (£1,140 to £1,310 by three increments), together with fixed car allowance of £108 per annum. Housing accommodation, if desired, will be provided.

Forms of application from City Engineer, Town Hall, Peterborough. Closing date for applications: 19th May, 1961.

C. PETER CLARKE,
Town Clerk.

Town Hall,
Peterborough.
April, 1961. S7285

STEVENAGE DEVELOPMENT CORPORATION

Applications are invited for the post of ASSISTANT LANDSCAPE ARCHITECT in the Chief Architect's Department on New Towns' Salary Grades APT.II £815/£960 or APT.III £960/£1,140 according to experience and qualifications but candidates should have passed the Intermediate examination of the Institute of Landscape Architects.

The work entailed is of an interesting nature and includes the treatment of Radburn type housing development amongst other projects.

Housing accommodation will be available in due course in an appropriate case.

Applications, giving full details and names of two referees, to be sent to the Chief Administrative Officer, Daneshill House, Danestrete, Stevenage, Herts., not later than Friday, 19th May, 1961. 7319

INVERNESS COUNTY COUNCIL invite applications for appointments in the County Architect's Department as follows:

(*a*) 1 FIRST ASSISTANT ARCHITECT—
Salary Scale £1,135—£1,200 per annum.

(*b*) 2 SECOND ASSISTANT ARCHITECTS—
Salary Scale £850—£1,150 per annum.

(*c*) 1 THIRD ASSISTANT ARCHITECT—
Salary Scale £640—£845 per annum.

Applicants for appointments (*a*) and (*b*) must be fully qualified. Appropriate placing on salary scales will be given in accordance with qualifications and experience. Housing accommodation may be made available if required. Applicants for appointment (*c*) must be qualified to intermediate stage. Applications, together with the names and addresses of three referees to the County Clerk, County Buildings, Ardross Street, Inverness, by 12th May, 1961. 7318

GLAMORGAN COUNTY COUNCIL

Invite applications for:—

(*a*) ASSISTANT PLANNING OFFICER for Eastern Area Office at Pontypridd.

(*b*) PLANNING ASSISTANT at County Hall, Cardiff.

Salary for (*a*) and (*b*) £1,140—£1,310 p.a. A lodging allowance will be paid in certain circumstances, and a car allowance will be payable in the case of appointment (*a*).

Applicants are required to have passed the final examination of the Town Planning Institute or other approved Professional Body or to be University Graduates, and in each case to have had five years' experience, including the period spent on theoretical training.

Applications stating age, qualifications and experience to the County Surveyor and Planning Officer, County Hall, Cardiff, and received by 12th May, 1961.

RICHARD JOHN,
Clerk of the County Council. 7345

COUNTY BOROUGH OF BARROW-IN-FURNESS
BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT
TECHNICAL STAFF

Applications are invited for the following posts:—

(*a*) PRINCIPAL ASSISTANT ARCHITECTS (2)
Grade V. £1,310—£1,480.

(*b*) TOWN PLANNING ASSISTANT (RE-DEVELOPMENT)
Grade IV-V. £1,140—£1,480.

(*c*) HEATING ENGINEER
Grade V. £1,310—£1,480.

(*d*) QUANTITY SURVEYOR
Grade V. £1,310—£1,480.

In each case commencing salary within the limits indicated.

Housing accommodation available. Five-day week.

Full details of posts and forms of application available from Borough Engineer and Surveyor. Closing date—26th May, 1961.

LAWRENCE ALLEN,
Town Clerk.

Town Hall,
Barrow-in-Furness. 7335

Architectural Appointments Vacant

3*s. per line; minimum* 12*s. Box Number, including forwarding replies,* 2*s. extra.*

RONALD WARD AND PARTNERS invite applications from ARCHITECTS, Senior and Junior. Long-term prospects. Scope for initiative and responsibility in interesting commercial, industrial and civic projects in British Isles, West Africa and Australia. Salaries commensurate with ability. Non-contributory Pension and Life Insurance schemes. Five-day week. Pleasant offices. Apply 29, Chesham Place, Belgrave Square, London, S.W.1. Tel.: BELgravia 3361. TC2960

£950-£1,500. ARCHITECTURAL ASSISTANTS with imagination and designing ability required to assist with large and important new developments in the central London Area. Telephone or write: Trehearne & Norman, Preston & Partners, 85, Kingsway, W.C.2. HOLborn 4071. TC4934

YORKE, ROSENBERG AND MARDALL have some vacancies for experienced STAFF, starting salary according to qualifications and experience, in the range £960—£1,200. Ring AMBassador 4521 for appointment. TC6200

EXPERIENCED and confident ARCHITECTS required to fill positions of responsibility in a growing and varied practice with industrial and commercial work throughout the southern half of the country. Applicants must have initiative as well as architectural ability to carry through contracts up to £100,000, working directly with Principals but with minimum supervision. Apply in writing to Thomas Mitchell & Partners, 20, Bedford Square, London, W.C.1. TC5418

SENIOR ASSISTANTS required. Please apply to F. G. Frizzell, A.R.I.B.A., 80, Portland Place, W.1. LANgham 1732. TC4943

ARCHITECTURAL ASSISTANTS of all grades, particularly Intermediate standard, required on varied and interesting projects. High salaries will be paid in accordance with skill or experience of applicant. Lewis Solomon, Kaye & Partners. City 8811. TC5970

PLAYNE & LACEY require experienced and enthusiastic SENIOR ARCHITECTURAL ASSISTANT for work on University project. Salary range £1,200 to £1,500. Write 19, Queen Anne's Gate, Westminster, S.W.1, or ring WHI 2552 for interview. TC5617

ARCHITECTURAL ASSISTANTS required in busy Bloomsbury office with varied practice. Good salary and prospects for suitable applicants. Five-day week. Write giving particulars of age, qualifications, experience, etc., to Box 918, c/o 7, Coptic Street, W.C.1. TC5647

OPPORTUNITY for Intermediate or newly-qualified ASSISTANT with initiative and all-round ability, to join youthful expanding practice in Croydon. Apply to Donald Rowswell & Partners, 11/11a, George Street, Croydon, or telephone CROydon 4080. TC5723

SENIOR ASSISTANTS required for work on large Hospital programme, excellent opportunities for the right men, salary £1,000—£1,400. Luncheon Vouchers and five-day week. Write giving full particulars to W. H. Watkins, Gray and Partners, 57, Catherine Place, S.W.1. TC5633

ARCHITECTURAL ASSISTANTS required for interesting work, including schools and hospitals, in Croydon office. Commencing salaries offered: £900—£1,150 for Associates, £600—£850 for students, according to age and experience. Five-day week and annual bonus. Write to George Lowe & Partner, 79, George Street, Croydon. TC5197

ARCHITECTURAL ASSISTANTS required with practical experience. Varied practice including contemporary work. Salary £700—£1,100 (plus L.V.s), according to qualifications and experience. Please write, giving full particulars, to Sir Giles Scott, Son & Partner, 9, Gray's Inn Square, W.C.1. TC5601

ERNO GOLDFINGER requires several qualified ASSISTANTS with at least 2 years' experience to take part in a growing programme of interesting work which includes large office buildings, central developments, Local Authority housing, schools and private houses. Good salaries and scope for men with sound knowledge of construction. 'Phone HYDe Park 5657. TC5084

ARCHITECTS' ASSISTANTS required, both Intermediate R.I.B.A. and Finals standard, with experience in this country. Good salary offered. Bernard Gold & Partners, 4/6, Savile Row, W.1. Regent 7551. TC6170

INTERMEDIATE to Final ASSISTANTS required immediately. Salary according to ability and experience. Theo. H. Birks, 38, Portland Place, London, W.1. LAN. 7236. TC9739

ARCHITECTS' ASSISTANTS required, Final and Intermediate standard, to work on large and interesting projects. Salary £850 to £1,000. Applicants must be good draughtsmen, with sound knowledge of detailing. Please write giving full particulars of experience, age, etc., to: F. W. Beech & E. Carnow Cooke, F./L.R.I.B.A., 15, Dix's Field, Exeter. TC6945

CHALLEN AND FLOYD require an ASSISTANT of Intermediate to Final standard with a minimum of five years' experience. Work will be interesting, varied and responsible. Salary according to age and experience. Luncheon vouchers provided. Apply to 7, Cromwell Road, London, S.W.7. KENsington 8334/8549. TC6491

PLAYNE & LACEY require experienced and enthusiastic ARCHITECTURAL ASSISTANTS. Salary range £900—£1,050. Write 19, Queen Anne's Gate, Westminster, S.W.1, or ring WHI 2552 for interview. TC6260

ARCHITECTURAL ASSISTANT at Intermediate Standard required for West End Branch of Provincial Architects. Interesting and varied work. Five-day week. Luncheon Vouchers. Write full particulars of age, experience and salary required to Box TC6925.

QUALIFIED ARCHITECTURAL ASSISTANT required immediately in Home Counties office. Considerable scope for work on industrial, commercial and housing schemes. Five-day week. Write full particulars of age, experience and salary required to Box TC6926.

ARCHITECTURAL ASSISTANT required. R.I.B.A. Intermediate standard, with some office experience. Varied and interesting work. Five-day week. L.Vs. Good salary for keen and competent person. William Crabtree, F.R.I.B.A., 8, Robert Adam Street, W.1 (WELbeck 9909). TC6776

ASSISTANT ARCHITECTS required, recently qualified or Intermediate standard, to join design teams working on a variety of interesting projects throughout the country. Work involves design and site supervision. Good salary. Apply, with brief particulars, to D. Greenwood, B.Arch., A.R.I.B.A., Staff Architect, John Collier Tailoring Organisation, Architects Department, Cardigan Crescent, Leeds, 4. 6900

WELL-KNOWN firm of City Architects with wide practice covering the whole country and Branch Offices in three of the Provinces, require JUNIOR ASSISTANTS. Five-day week. Good salaries. Luncheon vouchers. Box S6835.

EXPERIENCED ASSISTANTS required for good class work of all types. Applicants should be capable of managing contracts from sketch plan to completion. Salary by arrangement. Telephone WELbeck 8863 for appointment. 6828

EXPERIENCED ASSISTANT required in old established office. General practice. Apply stating experience, salary etc. Apply: Manning & Steel, F.R.I.B.A., Architects & Surveyors, 3 George Street West, Luton, Beds. S6876

SENIOR ARCHITECTURAL ASSISTANTS. Large Office has a limited number of vacancies for Senior Architectural Assistants, salary range £900—£1,500, to undertake work of a varied and interesting character.
Reply with particulars of experience to Box TC6875.

ASSISTANTS of various grades required in Architects Office. Salary according to experience. Write Nicholas & Dixon-Spain & Partners, 19, Hanover Square, W.1. TC6909

ARCHITECTS. Experienced ASSISTANTS required for work on interesting major schemes, able to take initiative and responsibility. Bonus, Pension and Life Assurance Schemes. Salary according to experience and ability. Full particulars to Hadfield, Cawkwell & Davidson, 17, Broomgrove Road, Sheffield 10. 6911

ROBERT MATTHEW & JOHNSON-MARSHALL have vacancies in their London office for ARCHITECTS at all levels of experience for a variety of interesting jobs. Apply to Robert Matthew & Johnson-Marshall, 24, Park Square East, N.W.1. TC6547

SIR JOHN BURNET, TAIT & PARTNERS have vacancies for ARCHITECTURAL ASSISTANTS of all grades. Salaries from £1,200 p.a. Luncheon vouchers, superannuation and medical schemes, non-contributory. Apply 10 Bedford Square, W.C.1. TC6126

BASIL SPENCE & PARTNERS require qualified and experienced ARCHITECTS to fill positions of responsibility on a major building programme. Write to 1, Fitzroy Square, W.1, stating experience and salary required. TC9824

£1,000/£2,000 p.a. will be paid to experienced competent ARCHITECTS by a private practice in the City of London. The work will be primarily on the drawing board on new and interesting projects of magnitude. A high standard of design and detailing ability is required. Please apply in writing to Box TC9360.

SENIOR ASSISTANTS required immediately. Salary by arrangement. Theo. H. Birks, 38, Portland Place, London, W.1. LAN 7236. TC1486

BOOTH, LEDEBOER AND PINCKHEARD require ASSISTANTS in the salary range £750—£1,250. Apply 17-20, Mason's Yard, Duke Street, St. James's, S.W.1. Tel.: TRAfalgar 1866. TC3119

NORTH & PARTNERS, Chartered Architects, have vacancies for two ARCHITECTURAL ASSISTANTS, for interesting works in various parts of the country. Opportunities for advancement in accordance with ability. Please state salary required and general experience. Broadway, Maidenhead. TC6761

GEORGE, TREW & DUNN.
Interesting projects include new hospitals, university buildings and multi-storey flats.

Qualified ARCHITECTS are invited to apply to 50, Eastbourne Terrace, W.2. Tel. PAD 6611. TC6403

ARCHITECTURAL ASSISTANT required for North Devon Office. Box TC6673.

ROFF MARSH, F.R.I.B.A., M.T.P.I., requires qualified and experienced ARCHITECT, also ASSISTANT of Intermediate standard. Interesting large projects including shops, flats, offices and schools; working in an office in pleasant surroundings. Write, stating age, experience and salary required to 125/7, London Road, Chelmsford, Essex. 6618

SENIOR AND JUNIOR ASSISTANTS. Only those who prefer a small office and an interesting variety of work on both old and new buildings should apply to: L. H. Bond & R. W. Read, 44, Castlegate, Grantham. TC6404

C. H. ELSOM & PARTNERS require two SENIOR ARCHITECTS with good technical experience and design ability for large scale projects. Pension scheme and luncheon vouchers. 19 Lower Grosvenor Place, S.W.1. VICtoria 4304. TC6733

EXPERIENCED ASSISTANTS required for responsible positions in West End office. Salaries £1,000—£1,500. Apply Box TC6371.

LEICESTER. SENIOR ARCHITECTS AND ASSISTANTS required for general practice. Appropriate salary paid. Apply by telephone or in writing for an interview to Herbert, Son & Sawday, 18, Friar Lane, Leicester. Tel. 56476. TC5307

BRYAN & NORMAN WESTWOOD & PARTNERS require ASSISTANT ARCHITECTS. Salaries up to £1,200. Apply to 21, Suffolk Street, S.W.1. TRAfalgar 1106. TC6736

RING KNIGHTSBRIDGE 3483 for congenial surroundings in a medium sized office in South Kensington. R. Mountford Pigott & Partners require JUNIOR and SENIOR ASSISTANTS with office experience to work on various modern schemes including multi-storey flats for private and L.C.C. development, Banks, Hospitals and a variety of interesting work. 6813

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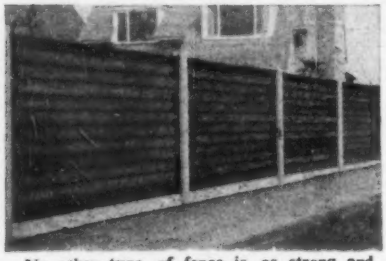
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Broads Manufacturing Co., Ltd.	117	0112
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Crane, Ltd.	55	0166
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Dialled Despatches, Ltd.	111	0837
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Downing, G. H., & Co., Ltd.	74, 75	0187
Drakard & Humble, Ltd.	96	1228
Duplus Domes, Ltd.	108	0193
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Evode, Ltd.	7	0878
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Falk, Stadelmann & Co., Ltd.	41	0214
Fibreglass, Ltd.	106	0219
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Hammond & Champness, Ltd.	42	0275
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Hickson's Timber Impregnation Co. (G.B.), Ltd.	25	0988
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Imperial Chemical Industries, Ltd.	61	0319
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James, W., & Co., Ltd.	118	0330
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Kirkstone Green Slate Quarries, Ltd.	136	0739
Lamb Hingley & Co., Ltd.	115	1118
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Lignacite (N.E.), Ltd.	107	0356
McCarthy, M., & Sons, Ltd.	136	0374
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Manger, J. & Son, Ltd.	114	0383
Marley Concrete, Ltd.	65	1298
Marley Tile Co., Ltd.	90	0870
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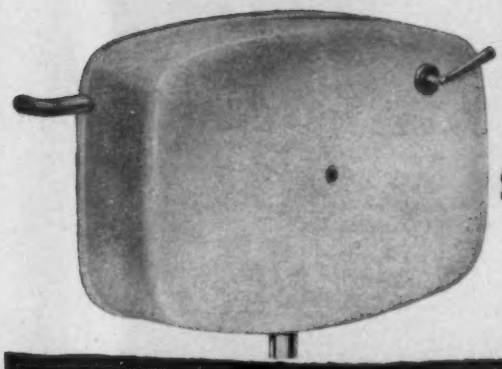
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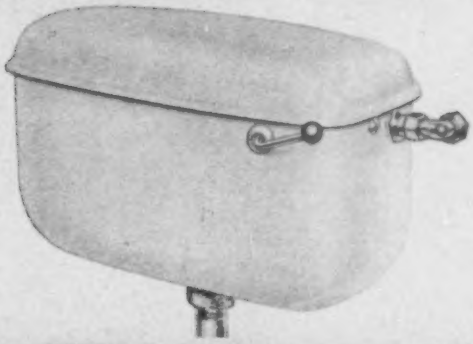


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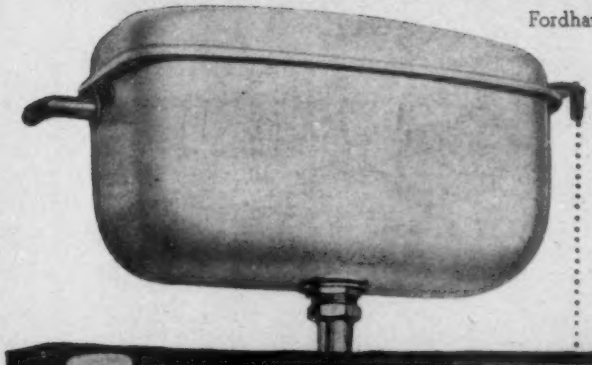
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